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MONTEREY, CALIFORNIA

THESIS

COMBATING TERRORISM WITHIN LOCAL POLICING THROUGH CRIME REDUCTION: USING REAL-TIME, SITUATIONAL AWARENESS WITHIN A DISTRIBUTED COMMON OPERATING PICTURE TO COMBAT ALL CRIME AND TERRORISM—V2I2SION PROCESS AND SAFECOP PILOT PROJECT

by

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March 2013

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ABSTRACT

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LIST OF ACRONYMS AND ABBREVIATIONS

AFIS Automated Fingerprint Identification System

ATM Automated Teller Machine

AKA Also Known As

COP Common Operating Picture

CompStat Computer Statistics

CAD Computer Aided Dispatch

CRS Congressional Research Service

CJIS Criminal Justice Information Systems

DOB Date of Birth

DHS Department of Homeland Security

FBI Federal Bureau of Investigation

FDOT Florida Department of Transportation

IRB Institutional Review Board

LEO Low Earth Region

MO Modus Operandi

NFL National Football League

NYPD New York Police Department

NSSE National Special Security Event

PERF Police Executive Research Forum

RMA Revolution in Military Affairs

ROC Rapid Offender Control

RMS Records Management System

RNC Republican National Convention

RH Recognition Heuristics

SOP Standard Operating Procedures

SAFECOP Situational Awareness For Enforcers' Common Operating Picture

SA Situational Awareness

SSA Space Situational Awareness

SAO State Attorney's Office

TPD Tampa Police Department

T&I Technology and Innovation

UCR Unified Crime Report

UASI Urban Area Security Initiative

V²I²SION Validation-Visualization-Information-Intelligence-Solution Optimization-

Next

VIN Vehicle Identification Number

ACKNOWLEDGMENTS

"When anyone speaks, it should be like words of God. When anyone ministers, it

should be from the virtue that God provides, so that in all things God may be honored

through Jesus Christ. To him is glory and dominion forever and ever. Amen."

1 Peter 4:11

To my beautiful wife, Mary, and our wonderful children, Olivia, Zoë, Zane, and

Zeta: Thank you for the collective sacrifices you have made—to make our home, our

community and our country that much safer.

"No one who has sacrificed home, spouse, brothers and sisters, parents,

children—whatever—will lose out. It will all come back multiplied many times over in

your lifetime. And then the bonus of eternal life!"

Luke: 18:29-30

To my law enforcement and academic mentors: Thank you for leadership and

guidance in the small things, and your friendship and support in the big things.

"If you have faith as small as a mustard seed, you can say to this mulberry tree,

'Be uprooted and planted in the sea,' and it will obey you."

Luke: 17:6

To my family and friends in faith: "Work (hard) as if everything depended on

you. Pray (knowing) everything depends on God."

Adapted from Saint Augustine

"Be strong and courageous. Do not be afraid or terrified because of them, for the

Lord your God goes with you; He will never leave you nor forsake you."

Deuteronomy 31:6

XV

I. INTRODUCTION

A. PROBLEM STATEMENT

This thesis asserts that there are certain crimes that demonstrate a precursory link to domestic or international terrorism. Logic would then suggest if a local police agency is performing all crime reduction well, it can subsequently deter, detect, and ultimately disrupt these crimes, which would have a direct effect on the terrorists who are in the planning or execution phase. Fighting local crime well equates to having an impact on domestic and international terrorism.

Information and intelligence sharing is as old as war itself, and war, in this case, is analogous to crime and terrorism. The noise, or meaningless data, that exists before the actual useable or raw data, must be filtered for information, and then elevated to knowledge, and finally wisdom—which many agencies call their best practices. The best opportunity for this is to develop a common operating picture that unifies the proven case management processes within a real-time, situational awareness platform.

Because a common operating picture creating the situational awareness can be steadily fed by the tactical and analytical layers of a policing agency, the intangible benefit of varying levels of line and management/command experience and functionality are creating a mosaic that transcends other means of linear and inconsistent communication. Such as the case with the New York Police Department's (NYPD) CompStat, this can create an operational efficiency within an organization and potentially lower crime and terrorism. The goal would be to do the process more quickly and bring it closer to the front lines.

The commonly appearing theme in all neo-CompStat, local law enforcement agencies (those that have adopted and progressed directly through the use of computer statistics) is that they develop their strategies around crime reduction. If they assertively

¹ William Bratton, "Cutting Crime and Restoring Order: What America Can Learn from New York's Finest" (lecture, The Heritage Foundation, Washington, D.C., October 15, 1996).

solve crime, they have an opportunity to deter, detect, and disrupt terrorism simply by doing their job effectively. There are approximately 18,000 law enforcement agencies in the United States who employ over 1.1 million of law enforcers working in the state and local communities.²

It has been shown that precursory crimes that are linked to the planning and execution of terrorism happen locally in relation to the actual target. These include acts such as illegitimate financing activity, surveillance of suitable targets, probing security, acquiring supplies, suspicious activity, performing "dry runs," and up to the deployment of personnel and tactical assets. This gives local law enforcement officers a tremendous opportunity to do their job in fighting crime—and possibly terrorism—simultaneously.

To fight crime effectively, the state and local agencies need technology in the form of a common operating picture (COP) that produces real-time situational awareness (SA) through normal activities. It is this proposed process that will allow the hard work, in the detailed, daily effort, to afford our nation the best chance to further reduce crime, through the sharing of real-time information and intelligence, as well as deterring, detecting and potentially disrupting the planning and execution of terrorism.

Existing research establishes that while all crime may not be motivated by planning or funding for future acts of terrorism, *some is*. If this is established, then by fighting all crime well, at the lowest common denominator and regardless of motive, countering terrorism is a natural derivative.

Regardless of the terrorism effect, the theoretical solution would be evaluated for success if sharing information and intelligence in a more consistent and timely manner could have an impact on local crime fighting. Again, if through a technological solution it is proven that police work is more efficient, causing crime reduction, then the positive influence established in the precursory crime nexus to terrorism reaps the benefit by doing the local crime fighting mission well.

² Brian A. Reaves, "Census of State and Local Law Enforcement Agencies, 2008," (NCJ 233982), Bureau of Justice Statistics, http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2216 (accessed September 20, 2012).

This thesis will attempt to generate a recommendation, via a technological solution, to improve the communication and crime fighting process, while asserting that local crime reduction has a nexus to detect, deter, and disrupt terrorism activities.

B. REASEARCH QUESTION

How could real-time, situational awareness technology and case management, in a single common operating picture, improve the ability of local police to detect, deter, and disrupt pre-cursory crimes associated to terrorism as a byproduct of reducing all crime?

II. LITERATURE REVIEW

A. INTRODUCTION

Four areas of relevancy were examined and analyzed as part of this literature review. The first applies to technology itself, specifically focusing on the sociotechnological perspective. The next two sections relate to the power of situational awareness in dynamic environments and strategic thinking as sense-making. The final review examines the nexus value between crime and terrorism, as well as the opportunities to have an impact at a local policing level.

B. TECHNOLOGY AND TECHNOLOGY IN LAW ENFORCEMENT: A VALUE ANALYSIS

It is often said that one must be a responsible man or woman before becoming a policeman or policewoman. Using a similar approach, chapter six of Charity in Truth, entitled "The Development of People and Technologies," addresses technology before deciding it has value in a common operating picture and supplied as a situational awareness platform in law enforcement:

Technology enables us to exercise dominion over matter, to reduce risks, to save labor to improve our conditions of life. It touches the heart of the vocation of human labor: in technology, seen as a product of his genius, man recognizes himself and forges his own humanity. Technology is the objective side of human action whose origin is found in the subjective element: the worker himself.³

The author continues, "Technological development can give rise to the idea that technology is self-sufficient when too much attention is given to the 'how' questions, and not enough to the many 'why' questions underlying human activity."⁴

The focus is on the objective and subjective side of the equation. Police officers come to work each day facing a myriad of data and information. As each shift changes,

³ Benedict XVI, "The Development of Peoples and Technology," in *Charity in Truth* (Boston, MA: Pauline Books and Media, 2009), 104.

⁴ Ibid.

information gets lost in the process. Additionally, new information is added to what was already accumulated. The criminals (and terrorists) thrive, not only on the slippage of information and intelligence transfer between incoming and outgoing shifts, but also on the slippage that occurs when information does not get shared between geography and various jurisdictional layers.

It is probably too critical to say that it does not get shared at all; however, *it's not quickly enough*. Technology has dramatically improved information and intelligence sharing in all levels of law enforcement. An example of this is Computer Statistics (CompStat), which was founded by NYPD in 1994 and is prevalently used in small, medium, and large agencies throughout the country.⁵ CompStat is referred to as a strategic control system designed to disseminate information on crime challenges and track efforts to combat them. Though it is shorthand for NYPD and other agencies, it tends to reside at the managerial levels of organizations that embrace it.⁶ Officers of many agencies also use in-car computers to manage their information, as well as receive calls for service, enter reports, and query information in an online records management system (RMS).

Somewhere between CompStat—which creates command and managerial accountability typically on a monthly basis on all or some of the geographic segments of a local jurisdiction—and the routine shift change—which can happen two to three times a day depending on an agency's deployment—there is a gap equating to the right amount of information that can be shared to shift the wisdom momentum to the law enforcers. After all, data becomes information, which becomes knowledge, then understanding, and then ultimately elevates to wisdom, which allows some officers to do things like beat criminals back to their residence before they can get inside and hide their spoil.⁷

⁵ Nicole Billante, "The Beat Goes On: Policing for Crime Prevention," Issue Analysis, no. 38 (July 1, 2003).

⁶ David Weisburd, Stephen D. Mastrofski, Rosann Greenspan, and James J. Willis, "The Growth of CompStat in American Policing," Police Foundation Reports (April 2004).

⁷ Gene Bellinger, Durval Castro, Athony Mills, "Data, Information, Knowledge and Wisdom," *Systems Thinking*, 2004, http://www.systems-thinking.org/dikw/dikw.htm (accessed August 10, 2012).

We (police as part of society) must keep asking ourselves <u>why</u> we want more technology, versus trying to get more *simply for the sake of more*. Focusing on the <u>why</u> more than simply the <u>how</u> can lead us farther down the proper path of progress. Subsequently, also this enables avoiding the slippery slope of not being able to sustain all technological components or how to make sure they are physically or industrially synthesized into the mission.

Eccles and Groth, discuss their socio-technology theory about using technology for problem solving, "Technology can be designed or implemented so poorly that the workload cost is greater than the workload saving."

This corroborates the "why versus how" in the previous paragraph, and how, more importantly than just why, should be the question, "Does a new technology improve communication and coordination and make the work group more efficient?"

Eccles and Groth continue arguing their position by referencing support from Hoffman, Hayes, Ford, and Hancock, who advocate that advancement in technology tends to be driven from within the technology and possibly missing or not giving enough attention to the humans that use the technology or the that problems the human agent might face. These researchers suggest that technological innovation should be centered on human- and problem-centered design instead of sheer advancements in the technology itself.

C. SITUATIONAL AWARENESS

1. General Situational Awareness

Wayne Gretzky is regarded as the greatest hockey player ever. ¹¹ He obtained this distinction based on his results, including scoring over 200 times in a single season and *in*

⁸ David W. Eccles and Paul T Groth, "Problem Solving Systems Theory: Implications for the Design of Socio-technological Systems," Cognition and Learning 3 (2006): 323–343.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Encyclopedia Britannica, s.v. "Wayne Gretzky," 2008, http://www.britannica.com/EBchecked/topic/245875/Wayne-Gretzky (accessed October 12, 2012).

over six seasons—a feat that has never been rivaled.¹² Despite the critiques of his small size, lack of strength and speed, he could consistently anticipate where the puck was going to be and execute the right move at the right time.¹³ One could argue that Wayne Gretzky mastered situational awareness.

2. Revolution in Military Affairs (RMA)

According to the Army Field Manual 1–02, situational awareness is:

Knowledge and understanding of the current situation which promotes timely, relevant and accurate assessment of friendly, competitive and other operations within the battlespace in order to facilitate decision making. An informational perspective and skill that fosters an ability to determine quickly the context and relevance of events that are unfolding. ¹⁴

In the 1990s, the Office of Net Assessment, Department of Defense, coined a phrase "revolution in military affairs" (RMA). ¹⁵ This phrase was defined as a "major change in the nature of warfare brought about by the innovative application of technologies, which combined with dramatic changes in military doctrine, and organizational concepts, alters the character and conduct of operations." ¹⁶

In his paper *The Revolution in Military Affairs: A Canadian Perspective*, Major J. Craig Stone of the Canadian Forces Command and Staff College also examines the theoretical writing on the RMA.¹⁷ He found the notions of information dominance and the information age is tied to the ability to process information faster and to have situational awareness on the battlefield.¹⁸ These notions are considered by many to be

¹² Encyclopedia Britannica, s.v. "Wayne Gretzky."

¹³ Frank Orr, "Gretzky, Only 16, Carries a 'Gold-Orr' Label," *The Sporting News*, January 19, 2008.

¹⁴ Eric S. Toner, "Creating Situational Awareness: A Systems Approach, 2009, http://www.upmc-biosecurity.org/website/resources/publications/2009/2009-06-10-SituationalAwarenessSystemsApproach (accessed May 21, 2012).

¹⁵ Robert Addinall, "Information in Warfare from Sun Tzu to the War on Terror" (dissertation, Royal Military College of Canada, 2004).

¹⁶ Ibid.

¹⁷ Ibid

¹⁸ Ibid

one of the defining characteristics of RMA. Military innovation is generally discussed in the context of types of innovation-peacetime versus wartime, technological versus doctrinal, and evolutionary versus revolutionary.¹⁹

3. CompStat

Whether in military combat or local law enforcement policing a community, situational awareness is paramount to consistent success. The New York Police Department (NYPD) is credited since 1994 with developing and using Computer Statistics (CompStat) as an accountability system for police leadership. This CompStat system allowed situational awareness to matriculate from strategic analysis, at a command and managerial level, to understandable actionable information to use at a tactical level. Within an environment of situational awareness, the fruits of this exchange allow:

- 1. Crime deterrence by increased presence in the appropriate areas;
- 2. Patrolling of identified crime hotspots; and
- 3. Targeting the few offenders that have shown responsibility for a majority of the crimes.²⁰

4. Ideological Offense and Ideological Defense

To continue to more deeply evaluate the value of situational awareness in the battlefield (crime community), European Enlightenment philosopher Niccolo Machiavelli attempts to clarify the role of ideological offense and ideological defense as information operations in different layers.²¹ The layer that relates to situational awareness indicates that the nature of society and the nature of military (police) activity are inextricably linked, and for the people to be involved, they need to be aware.²²

¹⁹ Addinall, "Information in Warfare."

²⁰ Billante, "The Beat Goes On."

²¹ Addinall, "Information in Warfare."

²² Ibid.

To modernize and localize this concept, we fast forward to today in Tampa, Florida and quote the current police chief, Jane Castor, who commonly says to the community, "There are over 340,000 of you [citizens] and only 1,000 of us [police]. You are going to reduce crime with our assistance, not the other way around." The undervalued or understated component of progressive success in NYPD, as well as many successful jurisdictions, might be that they have increased the communities' situational awareness about crime in addition to that of the police departments. NYPD posts its crime statistics by precinct on a weekly basis. ²³ Many agencies use Web-based crime mapping, whether commercial or government grade, to share with the community, not just for geospatial crime awareness, but to allow anyone with information to anonymously share that crime tip with the authorities. This allows for greater situational awareness in the community. Greater situational awareness in the community parlays into greater crime reduction since there are many more citizens (than law enforcement officers) to be information and intelligence collectors and sharers.

5. Speed Cycle

Another gap in local law enforcement's situational awareness is the speed cycle of crime data. In Samuel B. Griffith's introductory essay in *Sun Tzu's Art of War*, he discusses "speed" as one of three underpinnings of tactics and strategy.²⁴ While the essay did not distinguish ground speed from the speed of information, the focus here will be on the latter. For example, many agencies host their CompStat meetings on a monthly basis, but the data from the previous may have become stale. By using technology, with a common operating picture, situational awareness can become real-time and closer to the tactical level, thereby increasing the speed of information and intelligence. Invalidated data, although fast, can also be a challenge.

There are many technological solutions at present that share data at the computeraided-dispatch (CAD) point, and also after the records management process. These are

²³ City of New York, "Crime Prevention, Crime Statistics," New York City Police Department, 2012, http://www.nyc.gov/html/nypd/html/crime_prevention/crime_statistics.shtml (accessed March 9, 2012).

²⁴ Ibid.

both too fast (invalid crime data via CAD) and too slow (after the records processing cycle occurs). By being part of the validation process, or ensuring a valid offense has occurred, a potential case-ownership connection within a solution could outweigh the mere technology alone.

In 2011, at a Police Executive Research Forum (PERF) one-day workshop, police chiefs from around the country (typically from large and medium sized agencies) spoke about their CompStat utilization.²⁵ Many referenced a monthly session. Any agency that has achieved success in their jurisdiction now realizes that if the monthly CompStat meeting is the only situational awareness conveyed, then it is strategic versus tactical and actionable and, therefore, too slow. While a monthly meeting can show trends and assist with strategic planning, absent real time situational awareness, the front lines are fighting blind at the tactical level.²⁶

6. Space Situational Awareness

Johnston, Lewis, Hart, White, and Cox illustrate an operational comparison of situational awareness, demonstrating a more tactical and actionable approach in their discussion of space situational awareness (SSA) using a cloud-based architecture for significant risk associated with satellite operations.²⁷ While navigating satellites around what they define as the low earth region's (LEO), bit of debris ranging in the millions, is not a direct comparison with law enforcement's need for real-time situational awareness—there is a distinct parallel in that law enforcements needs SSA to make timely decisions as well.

Johnston et al., further argue that cloud computing allows resources, software, data, and other services need to become available on demand through an Internet-based

^{25 &}quot;Police Leaders at PERF/BJA Meeting Discuss CompStat: Best Practices and Future Outlook," *Subject to Debate*25, no. 2 (March/April 2011), Police Executive Research Forum, http://www.policeforum.org/library/subject-to-debate/2011/Debate Mar-Apr2011 web.pdf (accessed April 25, 2012).

²⁶ "Police Leaders at PERF/BJA Meeting Discuss CompStat."

²⁷ Steven Johnston, Hugh Lewis, Elizabeth Hart, Adam White, and Simon Cox, "Applying Cloud Computing to Space Situational Awareness" (Southampton, UK: University of Southampton, 2011), http://www.congrex.nl/11c01proceedings/Papers/2226375% 20Johnston.pdf (accessed November 24, 2011).

system.²⁸ Law enforcers need to see crime patterns, offender bulletins, criminal histories, neighboring agency risk, and a myriad of other information and intelligence on a moment-by-moment basis. This, by comparison, *is their version of space debris*.

Information accuracy, speed, and reliability in the field can ultimately improve line level situational awareness for the tactical decisions that need to be made. Bridging time (shifts/days off) gaps, as well as providing geospatial, temporal, and timely analysis can accelerate the situational awareness. This can reduce crime by bringing the opportunity to prevent or rapidly identify offenders committing crimes, which can then assist in the discovery of those precursory offenses related to acts of terrorism. The closer and faster the situational awareness is to the event, the better the options might become.

D. STRATEGIC THINKING AS SEEING AND SENSE MAKING IN CRIME FIGHTING AND COMBATING TERRORISM

1. Strategic Fallacies

An excerpt from Henry Mintzberg's 1994 *The Rise and Fall of Strategic Planning* mentions:

One day in 1943, Edwin Land's three-year-old daughter asked why she could not immediately see the picture he had just taken of her. Within an hour, this scientist conceived a camera [Polaroid] that would transform his company. This was a synthesis of the insight invoked by his daughter's question and his vast technical knowledge.²⁹

Even beyond the synthesis of insight and technical knowledge, it was a combination of *caring* about his daughter's vision combined with his *creativity* to allow her and eventually others' insights to become reality. This same approach can be used to solve crime today faster than yesterday. Why should law enforcement agencies wait until analysts build maps after the records management process occurs and then wait for managers to interpret these maps into an actionable deliverable to combat a current

²⁸ Johnston et al., "Applying Cloud Computing."

²⁹ Henry Mintzberg, "The Fall and Rise of Strategic Planning," *Harvard Business Review*, January-February 1994, http://staff.neu.edu.tr/~msagsan/files/fall-rise-of-strategic-planning_72538.pdf (accessed May 12, 2012).

criminal pattern or trend? Why cannot crime be validated, mapped, and visualized immediately then crowd sourced for faster case solving? With dozens of officers and sometimes hundreds working the ground every day, why should a commander or analyst inside an air conditioned office be driving the next strategic move instead of the officers working the street? This, too, would be a realization and synthesis of a vision based on caring about today and tomorrow's crime victims, similar to the Polaroid camera mentioned earlier, using the technical expertise to improve information and knowledge flow.

a. The World at Still

Mintzberg continues by announcing three fallacies of strategic planning.³⁰ The first fallacy describes how the world is supposed to remain still while plans are being developed, essentially saying that prediction is not possible. Everyone in the CompStat arena appreciates the business and managerial accountability that CompStat has brought to crime fighting. However, it must be recognized that, if CompStat is the only process being used in an agency today and especially just on a monthly cycle, then nobody is talking about crime patterns for 30–45 days.

Professor Rodrigo Nieto-Gomez of the Naval Postgraduate School once shared that he, too, disagrees with the predictive policing buzz saying that it is more about the explicative data.³¹ An agency can aggregate a posteriori data into a predictive view but nobody can tell someone where and when the next burglary or homicide is going to take place. However, if prediction is not possible, Sun Tzu says "speed" is possible.³²

³⁰ Mintzberg, "The Fall and Rise of Strategic Planning."

³¹ Rodrigo Nieto-Gomez, personal communication, July 10, 2012.

³² Mark McNeilly, "Six Strategic Principles for Managers," *The Sun Tzu Strategy Site*, March 30, 2006, http://www.suntzu1.com/ (accessed May 12, 2012).

b. Detached Management from Operations

The next fallacy described by Mintzberg deals with management needing to be detached from operations.³³ This is similar to the initial step of the intelligence process where requirements are derived at the administrative levels before the collection, processing, exploitation, analysis, dissemination, consumption, and feedback take place from the vantage points in the field. Arguably, this is similar to the concept of brick and mortar fusion. The view from inside does not show the disconnect from the field, but the view from the field gives tremendous clarity to what the gaps are in the lack of knowledge transfer and information flow. Bring that fusion to the police officers in real time by allowing them to create their own process and then watch the opportunities become unveiled. Mintzberg's section on the second fallacy concludes with vision not being available to those who cannot see with their own eyes and that real strategists get their hands dirty looking for nuggets that become the next strategy.³⁴ This requires daily immersion.

c. Failure of Systems

Mintzberg's final fallacy describes the failure of systems, presuming that these systems offer a level of artificial intelligence and an opportunity to replace or enhance human intuition.³⁵ The best part of this section describes the opportunity for a more realistic ability to process and expose more information but allow the humans to internalize it, comprehend it, and synthesize it.³⁶ In Howard Gardner's book, *5 Minds for the Future*, he cites one [mind] being the synthesizing mind that can work with the other four—a disciplined mind, a creative mind, an ethical mind, and a respectful mind.³⁷ In this learning space, the blending information with the human minds allows things get tried and tested, and those positive experiences become ingredients for new strategies in a

³³ Mintzberg, "The Fall and Rise of Strategic Planning."

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Howard Gardner, Five Minds for the Future (Boston, MA: Harvard Business Press, 2008).

dynamic learning environment. While a system might elevate the baseline of information and knowledge, especially in a crime fighting space, it takes the actual officers to synthesize the information and make it applicable.

2. Sense-making

Brenda Dervin, Professor of Communications at Ohio State University, offers a view that knowledge is the sense made at a particular point in time-space by someone.³⁸ This, coupled with the work of Henry Mintzberg discussing *strategic thinking as seeing*, seems to be two great ingredients to create the situational awareness required in the everdynamic realm of crime fighting and terrorism prevention.³⁹

In her Sense-making approach, Dervin continues as she describes knowledge transforming from a noun to a verb—always an activity embedded in time and space. 40 Solving crime is always an effort in a world of gaps. Somewhere between the historical crime trends and new offenses occurring and being solved; lay potential witnesses, forensics, modus operandi, investigator's experience, offender management, and case management. If knowledge in this equation can be described as connecting the information to achieve a potential solution, the ability to crowd source an answer must be a better opportunity than to harvest the information and investigate a crime or pattern of crimes in a vacuum. Connecting an offender to a crime is that noun to verb transformation of knowledge that Dervin refers to as the activity embedded in time and space.

³⁸ Brenda Dervin, "Sense-making Theory and Practice: An Overview of User Interests in Knowledge Seeking and Use," *Journal of Knowledge Management* 2, no. 2 (1998): 36–46.

³⁹ Ibid

⁴⁰ Ibid.

3. Seeing in Pairs

In the *Strategy Safari*, on the chapter "Strategy Formation as a Visionary Process" begins with a quote from Aristotle, "The soul…never thinks without a picture." Just like Howard Gardner's *Five Minds of the Future*, "seeing" by Mintzberg describes three pairs of factors sewn together by a seventh.⁴² These seven items of "seeing" can be associated with the situational awareness process for effective crime fighting:

a. Ahead and Behind

"Seeing ahead" is correlated to "seeing behind." Many agencies are trying to create the right recipe for the community to allow predictive policing to occur. Unfortunately, predictive policing, as mentioned earlier, could create a crime reduction performance expectation perceived by the community and, in some cases, the agency as having the forecasting ability to know exactly when and where the next crime is going to take place. While many describe predictive policing as taking disparate, but relevant, data and using the results to anticipate, prevent, and respond more effectively to future crime, maybe the term itself is where the problem lies. Predictive policing lends itself to an ideal of expectations, whereas if the term was explicative policing, it would take on a more humble process of unfolding and making clear the meaning of disparate data.

Meteorologists use historical data (seeing behind) to try to forecast (seeing ahead) the weather for tomorrow. Despite this scientific approach, they cannot predict which street addresses will see rain and at what particular time, nor can they predict how many inches of precipitation—particularly not to the point that one could skip watering one's plants on strictly their information. Most of us are accustomed to this report and take the broadcast in context to the daily results.

⁴¹ Henry Mintzberg, Bruce Ahlstrand, and Joseph Lampel, *Strategy Safari*: A Guided Tour through the Wilds of Strategic Management (New York: Free Press, 1998).

⁴² Mintzberg et al., *Strategy Safari*.

^{43 &}quot;Predictive Policing," National Institute of Justice, January 2012, http://www.nij.gov/topics/law-enforcement/strategies/predictive-policing/welcome.htm (accessed March 14, 2012).

Using the term predictive policing automatically puts the process in the realm of the defensive by giving the potentially shallow hope. Unfortunately, despite the data pointers, police are not going to be at the exact address to thwart the burglar. One thing can be done in this vein. If a burglar is arrested by reacting from seeing the immediate behind faster, which translates to faster crime pattern discernment, then the agency and the community can see ahead that whatever addresses the perpetrator intended to hit next. The next crime is prevented because the perpetrator is already apprehended. Speed (of apprehension of the perpetrator) prevents the next crime.

b. Above and Below

Zooming out, or "seeing the big picture" is important in strategic thinking, but it has to be supported by "seeing below," as described by Mintzberg. 44 Seeing solely from above is equated to those who take cold data and make strategies in the comfort of their offices. Yet, without the ability to change one's aperture to one of being primarily in the weeds, one's point of reference can be distorted. The ability to rapidly discern crime patterns, connect modus operandi, and process investigative information into a theory or reality of a solution can be in between those details at the scene of the crime and the geospatial context all processed in high speed. In today's crime fight, a pattern should not take five or 10 crimes to make a correlation. As a matter of fact, anything beyond two or three and an agency should be challenging their current processes. Technology can help to see this picture faster.

Beyond simply zooming in or out—seeing crime density via geospatial-temporal analysis—can help with place-based policing, otherwise known as hotspots. Since crime does not occur evenly across various landscapes and certain crimes have time-of-day tendencies, converting crime details into a thematic map using a choropleth method can help show crime saturation for a period by geography and time.⁴⁵ Each crime that would define the various levels of lightness or darkness has its own story. By

⁴⁴ Mintzberg et al., Strategy Safari.

⁴⁵ Wikipedia, s.v. "Methods of Thematic Mapping," http://en.wikipedia.org/wiki/Thematic_map (accessed March 14, 2012).

examining each case in detail, a strategy can be proposed to deal with the general or specific crime pattern.

Another example of seeing the big picture and focusing on seeing below and not just at ground level but actually seeing the underbelly—can provide the drilldown process to change the entire scenery. Hypothetically, a police district can create a spatial-temporal reasoning process that highlights, at a high altitude, which two-thirds of major crimes are occurring in 10 percent of the community. Upon analyzing the cases, it can be hypothetically discerned that 60 percent of that crime is residential burglary, and the majority of the offenders caught or suspected are juvenile offenders. By dissecting the underbelly, an agency can learn that the reason these juvenile offenders are committing daytime, residential burglaries is related to a tremendous truancy and suspension rate. Continuing to explore, it is discovered that the truancy and suspensions are due to minor school violations and a zero tolerance for petty crimes. Upon bringing the community together, the police-school neighborhood creates a process to give a juvenile, first time offender a civil citation and community or school service hours. The swift and certain punishment allows for immediate sanctions but does not suspend or demoralize the student. The correction curve eventually shows that residential burglaries go down tremendously, and it all commenced from looking above and following instincts to drill down below.

c. Vertical and Lateral

Unlike solving problems in a step-by-step approach (known as vertical thinking) or trying to daydream a problem away by seeing the big picture and fantasizing about solutions but never putting them into action, lateral thinking (or seeing beside) uses a creative approach and reasoning that is not immediately obvious.⁴⁶ The term of lateral thinking was credited to polymath, Edward de Bono of Malta.⁴⁷ De Bono emphasized

⁴⁶ Edward de bono, *Lateral Thinking: the Power of Provocation Manual* (Lancaster, PA: de Bono Thinking Systems, 2006).

⁴⁷ Gardner, F Minds for the Future.

the importance of lateral thinking, the capacity of shift frameworks, wearing of different hats, and coming up with a myriad of solutions to a perplexing dilemma.

A crime example of lateral thinking, or thinking beside, can be examined in the unfortunate reality of juvenile crime. Quite often, juveniles committing crime are released to parents or guardians unless they have a significant history. This does not work too well for the community as the juvenile most often does not see any immediate sanctions for breaking into a car, somebody's home, or even stealing from the local department store. This gives many juveniles the motivation to continue committing crime and also can elevate the local crime rate in an exponential manner. Juveniles committing crimes with impunity can wreak havoc in a neighborhood in a very short time when unabated by the criminal justice system, the parents, and ultimately the entire community. This lack of immediate offender control increases community crime rates.

A creative solution around the bureaucracy of battling juvenile crime inside the system was discovered in Tampa (Florida) midway through a nine year, crime reduction period. When it became obvious that juvenile crime was attributing to many of the UCR Part One crimes, 48 especially burglary, auto-burglary, robbery, and auto theft that and the bulk of the arrested delinquents were not scoring out to secure detention, lateral thinking kicked in. Realizing that these juveniles were placed on home detention by the judge in lieu of secure detention pending court and the ratio of home checks by juvenile probation officers was not effective, the patrol officers took matters into their own hands. A juvenile analyst began to itemize juveniles that were on home detention or probation that allowed home checks to occur. The patrol officers were given the list by patrol zone and introduced themselves to parent, parents, or guardians. After offering community-assistance opportunities to avoid a life of crime, the patrol officers would make these checks several times per day and make violation arrests as necessary. Juvenile crime plummeted and became the backbone of phase two of Tampa's crime reduction

⁴⁸ The Federal Bureau of Investigation's Uniform Crime Rate (FBI-UCR) does not discern the rate based on whether a juvenile or adult offender was involved in the offense.

success. The less crime fighting, the more time for proactive policing, which leads to more time for prevention—not only of crime but terrorism as well.

Psychologist Mihaly Csikszentmihalyi credits creativity (or lateral thinking) to an environment consisting of three autonomous elements: the individual, the cultural domain, and the social field (or those people and institutions that provide access to educational experiences and opportunities to perform). ⁴⁹ This is very important in the aforementioned example, as seeing beside is only of value when seeing beyond is placed into context. ⁵⁰ Having a creative process to combat juvenile crime, to lower overall crime, and allow proactive policing to increase seems to parlay well into Csikszentmihalyi's formula. Much like it was not until Einstein's innovative papers were given their due merit (versus simply being dubbed as atypical) and subsequently embraced by other physicists and mathematicians in the early 1900s; that they brought everyone's independent work on light, gravity, time, and space into context. ⁵¹ Local crime and terrorism, especially those precursor crimes combated in concurrence in the daily crime net, can be in the category of seeing beyond to keep the United States safer in the future.

d. Seeing Through

To summarize strategic thinking, after pairing seeing ahead and behind, seeing above and below, and seeing beside and beyond—it has to be seen through.⁵² Dervin speaks of retreating to the safety of certainty, reconverting information/knowledge back to a noun from a verb. An example offers story about a driver trying to change lanes and identifies a vehicle in his blind-spot, then instinctively retreats to the lane they previous occupied knowing it was formerly safe to be there. Seeing through; lands somewhere in the continuum between paralysis-by-analysis and extinct-by-instinct. Dervin cites a 1998 article on the "11 Deadliest Sins on Knowledge

⁴⁹ Gardner, Five Minds for the Future.

⁵⁰ Mintzberg et al., *Strategy Safari*.

⁵¹ Gardner, Five Minds for the Future.

⁵² Mintzberg et al., *Strategy Safari*.

Management" by Fahey and Prusak, and the one that seems to meld with seeing it through as it relates to strategic thinking is number eight, which reads, "Focusing on the past and the present, and not the future." 53

In combating crime as a head-on approach to preventing terrorism, sensemaking, as it marries to the strategic thinking approach, can potentially be placed inside a technological platform in order to solicit information/knowledge into being a verb versus noun experience. Similar to Einstein's work, which melded together mathematicians and physicists, so can Dervin, Gardner, Mintzberg and others to correlate knowledge management and strategic thinking into conquering crime and terrorism.

E. CASE STUDY: BETA SAFECOP PILOT DEPLOYMENT

As a way to bridge the information and intelligence gap for five operational days in the conventional crime fighting arena during the 2012 Republican National Convention, a new technology with RNC funding dollars was agile-developed. The solution, named Situational Awareness for Enforcers' Common Operating Picture (SAFECOP), consists of four tech-cornerstones and a fifth dimension of real-time, front-line fusion. This was to close the gap normally supplied by one-third of the personnel that did investigative and urgent follow-ups as well as a loss of 50 percent of the crime analysts. These assests were re-assigned during the 2012 RNC.

The results of SAFECOP over five days concluded with a total crime reduction of 26 percent. A specific SAFECOP result where a crime alert bulletin was made in real-time from a surveillance video in a commercial burglary, led to finding a suspect roaming the streets within two hours with the stolen property in his possession.

F. CRIME AND TERRORISM NEXUS

The broken windows theory associates disorder with crime density.⁵⁴ Precursory crimes, associated with acts of terrorism, have made similar associations especially since

⁵³ Dervin, "Sense-making Theory and Practice," 36–46.

⁵⁴ Billante, "The Beat Goes On."

September 11, 2001. The pairings (disorder-crime and crime-terrorism) have two additional associations within each. First, people and groups of people commit disorder, crime and terrorism; therefore, they can be caught. This evidence is empirical. As conveyed by Catholic priest and Ivy League psychologist Fr. Benedict Groeschel, Albert Einstein said there are two types of people—"Those that believe everything is a mystery and those that believe nothing is" 55—it is people that plan, that come, which act, and that flee. "Who" they might be can be a mystery, but the fact that "they" can be discerned and captured is not.

Second, and substantiated with research findings; shows that disorder, crime, and even precursory criminal acts involving terrorists has a local nexus. While information and globalization have made crime more mobile and transnational, local law enforcement has proven that it continues to see the same offenders, over and over, committing property crimes and varying types of fraud, as well as crimes against persons. Many agencies are trying to construct technological support around the long-time theory that 80 percent of the crime is committed by 20 percent of the criminals.

If the link between disorder and crime can be made (broken windows theory) and links can now be fused to show the relationship of precursory crimes relating to terrorism, then it makes sense to fight them in holistic order at the local agency level. If each local jurisdiction embraces similar tenets of situational awareness provided by proven, in-production technologies, then law enforcement can accelerate their tasks of combating disorder-crime and crime-terrorism.

In a 2007 Congressional Research Service (CRS) report for congress, titled *Terrorist Precursor Crimes: Issues and Options for Congress*, 11 terrorist precursor crime categories are listed:⁵⁶"Business and Charity Fronts, Counterfeiting Money,

⁵⁵ Benedict Groeschel, "The Mystery of God," *The Mystery of the Trinity*, Catholic Audio, April 11, 2004, http://catholicaudio.us/pub/audionet/EWTN_programs/Fr. Benedict Groeschel/Mystery of the Trinity/ (accessed November 10, 2011).

⁵⁶ Siobhan O'Neil, *Terrorist Precursor Crimes: Issues and Options for Congress*. (Washington, D.C., Congressional Research Service, 2007).

Counterfeit Goods, Narcotics, Smuggling and Import/Export Violations, Robbery and Theft, Fraud, Phone Scams and Cell Phone Activity, Bribery, Immigration and Identity Crimes, and Incitement."

While most of the underpinnings of each crime category listed are illicit financial gain, local law enforcement officials, with a strong crime fighting strategy, have the best opportunity to thwart, disrupt, or at least identify activities. In the same CRS report, it discusses that, irrespective of an ideology or strategic goal, all terrorist groups have several basic needs in common, including funding, security, operative support, propaganda, and appearance of force.⁵⁷ Activities are necessary to accommodate these needs, and precursor crimes can be defined as unlawful acts undertaken to facilitate a terrorist attack or to support a terrorist campaign.⁵⁸

As early as 2004, it was documented that patrol officers are more likely than any other law enforcement to have contact with residents of a community or patrol area who are also members of terrorist groups. Cited as a truism, based on a traffic stop or service call, police should be trained and well versed at recognizing indicators that reveal anything from a suspect's economic system or other activity used in the furtherance of their strategy.⁵⁹

Alexander and Mors documented in their article that:

More than five years since 9/11, it is critical to articulate new themes and best practices that will aid state and local law enforcement in combating terrorism. This article discusses how patrol officers can assist in identifying and capturing domestic and international terrorists while undertaking traditional duties, with particular emphasis on traffic stops and calls for service. In doing so, the study will also suggest a number of strategies and methodologies that they may employ in their communities. Furthermore, it will cover examples of patrol officer interactions with actual terrorists and benign actors while elucidating the means to distinguish between the two. Also, the article provides some context to the

⁵⁷ O'Neil, Terrorist Precursor Crimes.

⁵⁸ Ibid.

⁵⁹ Dean C. Alexander, *Business Confronts Terrorism: Risks and Responses* (Madison, WI: University of Wisconsin Press, 2004).

topic of terrorism, current terror trends, and other issues relating to terrorist operations (e.g., funding, recruitment, modus operandi) so that law enforcement has a better appreciation of the challenges facing them.⁶⁰

Local law enforcement officers make hundreds of thousands of contacts each year through calls for service, suspicious activity, traffic stops, and arrests. Using an example from Tampa, Florida as a reference, a 2010 traffic stop led to the discovery of major U.S. tax-fraud scheme and the potential for our tax-dollars being laundered on a transnational level and possibly linked to international terrorism funding. In the same jurisdiction, a victim felt so comfortable with his law enforcement relationship that he reported his own individual robbery of his tax-fraud spoils, which amounted to a portion of his three million dollar receivables on his nine million dollar filings.

Exploratory research by Smith, Damphouse, and Roberts, focused on the identification of general temporal, and spatial patterns of activity.⁶¹ On average, the terrorist groups studied had been in existence for some 1,205 days from the date of the first known planning meeting to the date of the actual/planned terrorist incident. However, on average, a lull in activities occurred during the last three to four weeks prior to the incident. Approximately two and one-half known planning and preparatory behaviors were recorded per incident and these varied by type of terrorist group. The spatial analysis revealed that terrorists typically live relatively close to the incident target.⁶² Nearly one-half of the terrorists resided within 30 miles of the target location. Similarly, approximately one-half of the terrorists engaged in their planning and preparatory activities within this distance of their residences. Finally, a similar percentage of preparatory behaviors took place within 30 miles of the eventual target of the terrorist incident.⁶³

⁶⁰ Dean C. Alexander and Terry Mors, "Best Practices in Identifying Terrorists during Traffic Stops and on Calls for Service," *Crime & Justice International* 23, no. 99 (2007): 4–12.

⁶¹ Brent L. Smith, Kelly R. Damphouse, and Paxton Roberts, *Pre-Incident Indicators of Terrorist Incidents: The Identification of Behavioral, Geographic, and Temporal Patterns of Preparatory Conduct* (Washington, D.C., U.S. Department of Justice, 2006).

⁶² Ibid.

⁶³ Ibid.

While the researchers were hesitant to identify this data with the life span of a terrorist group, their point was that they were very active (over three years), and more importantly to the local crime fighting nexus, they operated within a relatively small geographical space.

G. CONCLUSION

In 2009, Sullivan and Wirtz published an article titled, "Global Metropolitan Policing: An Emerging Trend in Intelligence Sharing." In their conclusion, it was affirmed that situational awareness across local jurisdictions was the responsibility of law enforcement and was the basis of global metropolitan policing.⁶⁴

In the proposed V²I²SION and SAFECOP project, technology is analogous to a wrapper on an already existing set of processes that, while disparately performed, help to create the needed consistency within a common operating picture to bring forth added efficiency in crime reduction and terrorism prevention. Essentially, V²I²SION and SAFECOP are the proposed solution to bring a tactical situational awareness platform in the form of a local or regional common operating picture and become that responsibility component previously mentioned.

In this case, V²I²SION and SAFECOP can answer the *why* portion of the technology question before the technological project begins and then moving slowly into the *how* portion. If the *why* piece had not been satisfied, then whether a matter of technological ethics or examining human communication and coordination toward problem solving, the project could commence in the *how* state, and quite possibly become orphaned from the "resistant-to-change" personnel that is inside the law enforcement culture.

⁶⁴ John P. Sullivan and James J. Wirtz, "Global Metropolitan Policing: An Emerging Trend in Intelligence Sharing," *Homeland Security Affairs* 5, no. 2 (2009).

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III. METHOD

A. OVERVIEW

Since the problem statement and associated hypothesis suggests that the use of technology, specifically the consistent sharing of actionable information and intelligence and case management can reduce crime more effectively and efficiently—both a qualitative and quantitative analysis will be conducted.

B. BURGLARY

First, a particular crime (burglary) will be qualitatively examined inside a single, medium-large agency, the Tampa Police Department, looking for gaps in the investigation process. Burglaries or other crimes involving offenders with burglary histories, strewn through the agency's three patrol districts will analyzed as separate cases. A comparison will be conducted of those solved with expediency through best processes versus those that went either unsolved or had a delay in solving due to less than exemplary practices. Cross-crime-offenders will also be identified within these cases to demonstrate the root behavior as a nexus to other crimes as well as those crimes identified as precursor activities to acts of terrorism.

The same crime will then be analyzed quantitatively over a three-year period among 26 other agencies, including the Tampa Police Department, within the United States that either are, or were, Urban Area Security Initiative (UASI) jurisdictions. ⁶⁵ By being a UASI jurisdiction, an agency would be an ideal comparative as a locality by showing terrorism risk based on receiving funding toward mitigation of that assessed threat, vulnerability, and consequence—known as risk.

⁶⁵ Federal Emergency Management Agency, *Homeland Security Grant Program* (Washington, D.C.: U.S. Department of Homeland Security, 2012).

C. QUALITATIVE SCOPE

The purpose of the qualitative analysis is to examine if some burglary offenses (representative of all crimes, including those identified as precursory crimes of terrorism activity) receive a better and timelier investigative experience than other burglaries—then all crimes can be reduced. The crime of burglary is being used since it is a property crime, versus a crime of violence. Many agencies tend to report these crimes similar to an insurance claim versus trying to actually solve them. Crimes such as homicide, even with a completely unknown suspect and modus operandi (MO/style), will get a myriad of investigators, analysts, and crime scene technicians at the scene, as well as relentless follow-up back at the station. Since resources limit the ability to investigate routine burglaries with the intensity of a homicide, if the case study reveals that burglaries can be elevated to homicide-grade urgency and follow-up, through a supporting technological platform and potentially closed by arrest, then that crime can be theoretically reduced.

The reduction of one type of property crime, *burglary*, can lead to a similar process for all crimes, and, therefore, reduce crime in a locality. That reduction, through de-randomization of effort inside a common operating environment can translate to more proactive policing and allow an inversion of the concern that due to the domestic efforts on anti- and counterterrorism, local crime may increase because of the added responsibility due to the demand on the same or less resources.⁶⁶ Less crime, argues more time to proactively enforce and deter, detect, and disrupt terrorism.

The Tampa Police Department has three patrol districts to serve the community. Each patrol district is commanded by one major, subdivided into two patrol sectors, and commanded by captains who directly report to their respective majors. While the agency has standard operating procedures (SOPs), as well as a department mission, and strategic focus, each district is designed to operate with similar, decentralized resources in order to customize their tactical solutions. This design is important to the research methodology in that since each district houses exactly the same resource functionalities and operates to an

⁶⁶ William Stuntz, "Local Policing After the Terror," The Yale Law Journal 3 (April 2002): 2137.

agency mission and strategic focus, their tactical style of communicating information, intelligence, as well as apply urgency and consistency within case management can be affected by subjective factors such as leadership style and sub-deployment schemes.

By example, because the department lacks a technological-based work template to operate within a common operating picture and provide full-time situational awareness across the agency's work shifts, work cycles, and geographic boundaries various pieces of the investigation puzzle can fall into these communication gaps to the demise of the unknowing victim and to the aid of the benefitting criminal. If one district uses a property crimes' detective to be available and bridge the investigative gap on an adverse shift (evenings versus days), seven days per week, that district may have more opportunities to keep investigative momentum than a district that does not operate in a similar way.

By using one particular agency (i.e., TPD) and a specific property crime/offender (burglary), the ability to examine multiple case studies under the various patrol districts; allowed consistency with the same mission and strategic focus. The variable, however, is how each reports, investigates, communicates and follow-ups with different urgency and intensity. This will set the stage for the use of a technological support tool to help standardize and de-randomize the approach. This will potentially allow an opportunity for a solution to be developed that will template a process for all best practices used by the agency. As it is, the agency uses practices and processes in varying degrees and inconsistently.

Since there are six patrol sectors commanded by three different majors and six different captains, reports will be pulled from each to serve as a control sample. (See appendix for the report copies). These control sample cases will have the victims' identity redacted for privacy reason, including the name and address of the incident; or be cleared through public records' release review. Residential burglaries, commercial burglaries, and other cases with offender burglary histories will be used for the case study. These control sample cases will be considered cases with gaps in investigative leads, or deadend cases. This means either the varying techniques within the industry of law

enforcement, as well as the agency's best practices have either been exhausted, or they have been inconsistently applied at the victims' expense or the suspects' benefit.

While each unsolved case is considered inactive, or potentially unable to be solved without some unique piece of evidence or admission surfacing in the future, each case will be examined independently. The each case will be analyzed collectively for individual data nodes that could potentially exist on a theoretical, technological solution to help keep the case "alive." An inactive case, which sits archived in a records management system and potentially forgotten, will not remain readily accessible. Therefore, it will not be a part of the common operating picture and situational awareness, which allows the criminals to prosper in additional opportunities.

A set of residential and commercial burglaries, as well as cases with offenders having a burglary history will also be extracted from the record's section to be sample data. All cases of these cases will have been solved with an arrest. Gap analyses will be made within the samples of the data nodes for potential use of a common operating, supporting technological work template to potentially increase speed and solvability of cases. In essence, the sample will be reverse engineered (reverse investigated) to see which case management process was missing in the inactive cases that would allow it to become solved.

Florida State Statute 810.02 explains the probable cause for burglary as:

810.02 Burglary.

- (1)(a) For offenses committed on or before July 1, 2001, "burglary" means entering or remaining in a dwelling, a structure, or a conveyance with the intent to commit an offense therein, unless the premises are at the time open to the public or the defendant is licensed or invited to enter or remain.
- (b) For offenses committed after July 1, 2001, "burglary" means:
- 1. Entering a dwelling, a structure, or a conveyance with the intent to commit an offense therein, unless the premises are at the time open to the public or the defendant is licensed or invited to enter; or

- 2. Notwithstanding a licensed or invited entry, remaining in a dwelling, structure, or conveyance:
- a. Surreptitiously, with the intent to commit an offense therein;
- b. After permission to remain therein has been withdrawn, with the intent to commit an offense therein; or
- c. To commit or attempt to commit a forcible felony, as defined in s. 776.08.67

D. QUANTITATIVE COLLECTION AND ANALYSIS

Beyond examining the case studies within a single agency, analysis the same crime (burglary) will be used to compare the 26 agency's (including Tampa's) arrest responsiveness to this offense over a three-year period: 2008–2010. The Federal Bureau of Investigation's (FBI) Uniform Crime Report (UCR) standardizes the national elements for burglary as:

The FBI's Uniform Crime Reporting (UCR) Program defines burglary as the unlawful entry of a structure to commit a felony or theft. To classify an offense as a burglary, the use of force to gain entry need not have occurred. The UCR Program has three sub classifications for burglary: forcible entry, unlawful entry where no force is used, and attempted forcible entry. The UCR definition of "structure" includes apartment, barn, house trailer or houseboat when used as a permanent dwelling, office, railroad car (not automobile), stable, and vessel (i.e., ship). ⁶⁸

Responsiveness will be defined as a ratio of the number of burglaries within the three-year period, by year; as compared to the number of arrests for burglary within the same year. This will then be correlated to the cities' crime rate status. It is important to note that this is not case-clearing statistics, but a ratio of those burglaries that were committed within the calendar year and the arrests within the same calendar year—regardless of the case connection. However, this will not capture warrants for burglary

⁶⁷ Florida Legislature, "The 2012 Florida Statutes," http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0800-0899/0810/Sections/0810.02.html (accessed October 4, 2011).

^{68 &}quot;Crime in the United States," Federal Bureau of Investigation, 2009, http://www2.fbi.gov/ucr/cius2009/offenses/property_crime/burglary.html (accessed November 30, 2011).

within or outside the measured jurisdiction, but only those arrests that have been made either in-progress or latently without a warrant being issued. The relevance here is denoted in speed of arrests which serve as a counter-measure to being people being victimized by more burglars—get away today; commit more tomorrow. While a monthly ratio would be preferred to an annual ratio to demonstrate speed, the data for that granularity would have been cumbersome. Thus, a three-year examination was preferred as a measure of consistency.

The purpose for the using the UASI jurisdictions, whether tier one or tier two cities, is to add the root nexus of being geo-assessed for terrorism risk. Since one of the main features of this research is to potentially thwart terrorism as a byproduct of fighting crime well, mapping UASI jurisdictions' ability to be responsive to the crime of burglary should reveal the details of their particular strategy results to what is deemed a property crime. Fight burglary well; fight all crime well. Fight all crime well; potentially fight terrorism well.

The following meta-data will be captured minimally for each of the 25 UASI law enforcement agencies, inclusive of the responsiveness-to-burglary-data to show proportionality to Tampa: Agency name; national city ranking; national crime ranking; sworn personnel authorized strength compared to citizens; UCR burglary count for 2008, 2009, and 2010; burglary arrest counts for 2008, 2009, and 2010; and analytical strategy or strategies (e.g., Intel-led, Predictive Analysis, SMART policing, and CompStat).

E. ANTICIPATED OUTCOME

The qualitative analysis is anticipated to reveal that those cases that yielded an expedient arrest followed a particular process cycle in contrast to those cases that became inactive or had delays in solving but that had actionable opportunities or a gap in the investigative processing. If this hypothesis is demonstrated in the analysis, then it will fortify the case for the use of a situational awareness and case management field-based technology.

It is also expected that the quantitative analysis will reveal that those agencies in the UASI jurisdictions with a higher risk assessment for terrorism will show a lesser achievement than the home agency (Tampa). It is expected that the home agency will have two opportunities for improvement with the use of a field-based technology. The first will be to potentially solve crime faster. The second would be to better detect, deter, and disrupt terrorism in the agency's particular locality.

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IV. QUALITATIVE RESEARCH

A. INTRODUCTION

As mentioned earlier, using burglary as an representative sample, including those examined as precursor crimes of terrorism, makes an interesting choice. Like a struggling marriage, the tenacity to solve a burglary with no leads comes down to an individual or collective choice. One can both choose to stay married and endure the fire together and feel the joy in the future or quit and move on to the next chapter of life and leave the victims and statistics behind. Little compares to the joy of solving who-done-it burglaries.

In the Jim Collin's book, *Good to Great*, there is a story about David Scott, a world-class triathlete who wanted to progress beyond his current ability. Despite an already strict diet regiment, he decided to rinse his cottage cheese in order to make his training diet have even less fat, versus accepting its normal processing.⁶⁹ Some use as an analogy that represents the extra 10 percent in performance, rather than settling for the normal 75 to 90 percent.

Using a single agency for the research in most cases would not be ideal. However, when an agency such as the Tampa Police Department is down over 64 percent in overall part one crimes since 2002, and specifically down in burglary over 56 percent (6,283 in 2002 versus 2,718 in 2011), it is reasonable to examine the processes against themselves. This is much like a track athlete trying to avoid a plateau by progressing his or her score.

In 2008, one of the three patrol districts in Tampa, Florida was struggling with the crime of burglary. There were no definitive patterns because patterns were overlaying other patterns, and none of the patterns were discernible until they were reverse engineered into post-arrest, case studies. One patrol sergeant, Jerry Clark, who had a distinct dislike of burglars said, "The burglars in this district are like hydras [referring to

⁶⁹ James C. Collins, "Culture of Discipline: Rinsing the cottage cheese," *Good to Great*, William Collins Publishers, Hammersmith, London, 2001.

the mythological, many-headed water serpents], you catch one (metaphorically cutting off its head), and two more (heads) grow back."

The first thing that had to be done to create a modern process was to dissect the current one. An analysis of the process revealed there were too many gaps, especially at the point of investigative origin. Although the scenes were investigated, the crime labs came out, and, of course, the proverbial neighborhood surveys were done, not necessarily to catch anyone, but to have a check-off for the process. The case then would be routed to a property detective, but only if there were leads identified at the scene. Otherwise, the investigation was about as useful as an insurance claim.

Many agencies may not consider the crime of burglary a big ordeal. After all, the Tampa Police Department, at this point was down over 42 percent in Uniform Crime Report (UCR) Part One Offenses; which includes burglary. This translated to over 15,000 less victims between the end of 2002 and the end of 2007.⁷⁰ Not many agencies, if any reach this point, so why not look to simply sustain this effort, hold back the repeated victims on each year, and convey to the community a collaborative job well done? In other words, be satisfied with that 75 to 90 percentile performance. Well, unbeknownst to the department and the community, the effort placed into solving burglary more effectively identified a much more honed process for all crimes, and between 2007 and 2011, netted another 8,000 less victims.⁷¹

There was no specially developed process in the "year-of-the-burglar" during 2008, and nothing magical happened either. The investigative components were always there, they just were not done quickly enough or sustained well enough. The process needed to be done more quickly, and with more intensity than ever before. Once the investigative processes and sharing of information and intelligence were sped up, momentum started identifying perpetrators within the system of systems and the

department was able to get ahead of the hydra-headed burglar to the point that is was

⁷⁰Tampa Police Department, *Annual Report* (Tampa, FL: Tampa Police Department, 2011).

⁷¹ Ibid.

actually *people* (*known offenders*) committing the crimes—not some mysterious and mythological creature.

Relentless follow-ups were the key, and leads were developed whereas in the past cases were just accepted as "no leads." Not only were the micro-processes sped up, but an environment was created in which to share weekly information and intelligence. These conditions consistently revealed the following:

- Gaps in processes that were now put into a group-think environment
- Sharing of modus operandi (MO) and being connected to offenders based on collective experience
- Generating offender knowledge of cross-crime offenders, giving validation that many offenders commit multiple offenses and stay within a certain geography

By example, here are several cases that revealed the improved process, the remaining weak processes, and the cross-offenders. If these can exist between burglary and other crimes, they can exist in precursor crimes related to terrorism planning and execution.

B. GOOD PROCESSES, WEAK PROCESSES AND CROSS-OFFENDERS CASE ANALYSES

The following is a analysis of case studies with indicate good processes, weak processes, and/or cross offenders (Tables 1 through 15).

Table 1. Case Number: 2009–354041

Case summary:

On **June 19, 2009**, a burglary was reported to the commercial business, "Paintballers" at 2142 W. Hillsborough Ave. in Tampa, FL. Surveillance video revealed the presence of two white males, one with a tattoo, driving a white older model Ford Aerostar van. The van had the faded words "Coca Cola" on the side of the van. The males used a sledgehammer to break the front glass of the business and steal several items. The latent investigator responded to the Coca Cola Corporation at Fowler/59th St. regarding the leads on the van. The manager sent the detectives to the Greater Tampa Bay Auto Auction, where the vehicles no longer used are sent for wholesale purchasing. There the detectives received a list of VIN numbers on Ford Aerostars that were sold in the past 12 months. The list was cross referenced with known offenders and close proximity to Paintballers. Surveillance was set up on one residence and the suspect vehicle appeared. Continued investigation identified the suspect. All of this was done within 24 hours of the offense occurring. The defendants were charged accordingly.

Process Gap Analysis:

This is an example of speed and relentless follow-up. While no gaps appear to be present in this case example, scenario planning asks, "what if" as it relates to the positive leads becoming cold as opposed to hot and viable. The steps to be taken, if momentum was lost, would be apply a situational awareness case management solution so the next follow-up team could avoid redundancy. The defendants and their modus operandi can also be captured for future crime-to-offender algorithmic computations.

Table 2. Case Number: 2009–378142

Case summary:

On **June 27, 2009**, an armed robbery of the Circle K at 1451 Fowler occurred. The suspects were two black males, one of which was captured briefly on video prior to putting on his mask. The video was collected immediately after the offense occurred and sent to Crimestoppers for media coverage. **On July 10, 2009**, a Crimestoppers tip came in stating that the robber was named "Joe," and that he had been recently arrested. Some other information, including possible associates, was gathered. Latent investigators immediately began researching all black males that had been arrested in the previous few weeks with the name "Joe." After reviewing numerous photographs, a possible suspect was identified as a physical match. Additional investigation positively identified that subject had committed the crime. The defendant, Joey Coleman, with a date-of-birth (DOB) of 9/24/90, was charged with this offense. He has an extensive history to include burglary offenses.

Process Gap Analysis:

The rapid processing of the on scene video, sharing to the local community, quick action on the anonymous tip, and history of cross-offenses, including burglary, shows a solid investigative approach. This apprehended robber is also a cross-offender who could potentially be captured in the offender data for future offenses, should he be released. Other, open robbery and burglary cases can be reviewed against this defendant by using his arrest overlay by geography and his modus operandi for potential case closure, especially since he was actively committing crimes.

Table 3. Case Number: 2012–136408

Case Summary:

On March 8, 2012, an intrusion alarm and a subsequent residential burglary were discovered at 2901 Kelly Ridge Lane. The responding officer immediately noted that he had responded to 2903 Kelly Ridge Lane several times in the past for a juvenile who was delinquent in various ways, including domestic issues and truancy (offender awareness). It was determined that this same juvenile, Reginald Harper, DOB 5/31/98, was in fact at home and suspended from school. A witness identified Harper as having been in the victim's yard around the time of the offense. When questioned, Harper admitted to breaking into the victim's home, and the money stolen from her bedroom was recovered. Since this arrest, Harper has been involved in several other burglary related crimes in the area.

Process Gap Analysis:

Having offender awareness momentum from several years of relentless follow-ups to all crimes allowed the previous effort of offender awareness to be recognized by the originating officer. By applying a real-time, situational awareness tool offender can be part of the future algorithms required to solve potentially new cases similar in nature. There is no reason to rely on happenstance, when a real-time, distributed technological information and intelligence sharing platform can offer consistency against the criminals.

Table 4. Case Number: 2011–700861

Case Summary:

On **December 21, 2011**, a residential burglary was reported at 1733 E. Mulberry Drive. The victim reported that some time overnight an unknown person entered her home and stole her ATM card, among other small items. The responding patrol officer, with the assistance of her zone Rapid Offender Control (ROC) officer, had the victim call her bank to determine if the card had been used. The card had in fact been used at a local 7–11. The video was collected and shown to the victim who immediately identified the subject as her niece's boyfriend, Chad. Chad Bernhardt, DOB 12/19/80, was located in Hillsborough County later that afternoon and charged accordingly.

Process Gap Analysis:

In 2010, street level narcotics officers, and street anti-crime officers were merged together for a more holistic crime focus. This become a deployed layer between the patrol officer and the area detective. Detectives were de-specialized and given areas of responsibilities as the offenders became more cross-offending by area rather than by specialty of crime. This deployment was born out of the need to keep up with the new processes started in 2008. Previously, this case may have been referred to a latent investigator and there would have been slim possibility of running down a video the same day the offense occurred and making an arrest.

This particular case had a positive ending. To repeat this success, a technological solution that provides case management progress would be ideal, maintaining functionality of formatted solution.

Table 5. Case Number: 2011–629469

Case Summary:

On **November 11, 2011**, a commercial burglary was reported to the business located at 7901 N. Nebraska Ave., a storefront rented temporarily by the Florida Department of Transportation (FDOT), who was doing roadwork in the area. Two small refrigerators were stolen. Very clear fingerprints were visible on the glass at the point of entry. The supervisor on scene called a fingerprint specialist in on overtime to analyze the prints (the offense was reported on the weekend). The prints were run through the Automated Fingerprint Identification System (AFIS). Identification was made and the suspect, Jason Prudhomme, DOB 6/19/70, was in custody and charged with the burglary within 12 hours of the reporting of the crime.

Process Gap Analysis:

Supervisory grade accountability in the field and intense forensic follow-up, including calling in a latent fingerprint investigator, kept additional burglaries from occurring. Speed and good decisions are apparent in this case. To allow the continuation of this model in all cases, case management progress should be placed into one common operating picture. This will allow not only good case management and investigative flow, but it will allow a template to be re-created in similar scenarios.

Table 6. Case Number: 2011–618292

Case Summary:

On **November 5, 2011**, a shooting occurred at Salem's Gyro, 1611 N. Nebraska Ave. The victim died of his wounds shortly afterwards. An officer was on scene and viewed the surveillance video of the incident. The suspect was wearing distinct camouflage clothing and had a thick beard. He recalled arresting a subject matching that description in **January, 2011** named Jordan Hill, DOB 3/6/88. The video was shown to associates of Hill who identified him as the shooter. Hill confessed to his involvement in the murder and was charged accordingly. Hill has an extensive criminal history, including burglary.

Process Gap Analysis:

Because the officer had good knowledge of area, to the level of recollecting what they were wearing during the previous arrests, a person who had a burglary past was rapidly arrested for murder.

This case relied on a key recollection of a known offender by one officer. If this defendant had been previously placed into an available technological solution, then the data would have been available to all on-duty personnel for a potential correlation to this non-burglary offense.

Table 7. Case Number: 2012–92953

Case Summary:

On **Feb 16, 2012**, a home located at 1418 E. 98th Ave was burglarized. **On Feb 24, 2012**, an Automated Fingerprint Identification System (AFIS) identified a fingerprint as matching those of Andre Clemons, DOB 9/5/95, a notorious burglar in Sector C of District Two. The print was lifted off a piece of property stolen in the burglary (a Monster cable box) and dropped by the suspect as he fled into the next yard. Andre Clemons was arrested by a ROC on **March 17, 2012**. He confessed to possessing the stolen property from the burglary and was charged accordingly.

Process Gap Analysis:

The print was examined and acted upon too slowly. Allowing eight days to lapse between the crime and the identification, and then several more weeks before an arrest can allow many more crimes to occur. This could be avoided by having better case management process and having a technological awareness system in place with an alarming feature to keep all investigative hands in the progress loop of updated information.

Table 8. Case Number: 2011–514727

Case Summary:

On **September 12, 2011**, a burglary was reported at 6601 N. 30th Street. On **December 27**, an Automated Fingerprint Identification System (AFIS) match was made from a print on a windowsill (the point of entry) to Nathan Tomlinson, DOB 1/17/81. Tomlinson was located and arrested on 1/18/12. He denied involvement in the burglary and the case was direct filed to the State Attorney's Office (SAO).

Process Gap Analysis:

Over three and on-half months passed before the identification of the print was made. Regardless of the prosecution in this case, the suspect may have committed a tremendous amount of burglaries and other potential offenses in the time lapse. Having better case management and situational awareness updates could have eliminated this challenge.

Even with the delay, if the data on the offender was placed, post arrest, into a geo-spatial situational awareness solution then it is possible that his actions can be reverse-investigated and possibly discovering through correlations his involvement in other area burglaries. This potential benefit is not only to the other victims, but can become a future benefit to new burglary victims by having a better chance for a longer sentence – thereby being off the streets and committing more crime.

Table 9. Case Number: 2009–493545

Case Summary:

On **August 21, 2009**, a burglary is reported at 214 W. Giddens Avenue. The report was not assigned to a latent investigator until **August 28, 2009** in the afternoon. The detective assigned to the case is able to identify the suspect and the fact that some of the stolen property was pawned after the initial interview with the victim, which occurred the day the case was assigned. The suspect, Joseph Frye, DOB 4/13/60, committed an armed sexual battery on **August 28, 2009 at 0245** at 5607 N. Seminole Ave. The victim was a 75 year old woman. The suspect had been released from the Florida state prison system on **August 1, 2009**. He had been imprisoned five times in his lifetime for various violent offenses including rape, burglary, and robbery.

Process Gap Analysis:

This burglary followed a typical routing of "no leads." The new process caught the case in what was labeled a "notification" of any part one crime in a detective's zone led to a follow-up, which is less than a formal case referral. Had the follow-up occurred immediately, it may have been possible to have avoided the horrific rape that occurred on the date the burglary was actually assigned for follow-up via the notification process. It also may have been possible to have avoided this horrific offense had the defendant been recognized as a cross-offender (burglary-rape) or had the officers and detectives been aware of the defendant and his history in time to connect him to the robbery.

Table 10. Case Number: 2011–668468

Case Summary:

Between the dates of **November 21, 2011 and December 2, 2011**, eight commercial armed robberies occurred throughout the city of Tampa committed by the same subjects. The pattern was dubbed the "Armenia Corridor" because of the geographical area that the subjects were frequenting when committing their crimes. The last robbery occurred on Friday, December 12, 2011 at El Zarape Restaurant, located at 4820 N. Armenia Ave., at 2245 hours. Going unnoticed by investigators until approximately 1600 hours the next day, a T-Mobile cellular phone was stolen from the victim in this offense. The phone was pinged and a vehicle seen in one of the previous offenses (Faedo Bakery) was located in the area of the cell phone, which was still on. The vehicle was followed, the suspects were arrested, and numerous pieces of evidence were recovered including weapons and masks. This brought an end to this violent crime spree.

Process Gap Analysis:

The lapse almost 24 hours before technologically investigating the stolen phone could have allowed the commercial robbery pattern to continue, possibly putting future victims at serious risk. By having these crimes accounted for inside a single, situational awareness technology, process gaps could potentially be recognized more quickly and solutions applied more effectively. This case turned out positively once the phone information was investigated. However, a case that wasn't a part of a major pattern may have allowed this phone opportunity to go unnoticed and the phone may have lost service. Either way, it might not have been possible to follow up.

Additionally, had this cross-offender (robbery-burglary) data been previously captured in a technological solution made and available in real-time to the pattern investigators, there may have been a faster correlation made and prevention of the additional robberies.

Table 11. Case Number: 2008–347402 and 08–357777

Agency: Tampa Police Department | Case Number: 2008–347402 and 08–357777

Case Summary:

In June 2008, Walter Pinckney, DOB 2/26/90, and three other defendants went on a violent crime spree, committing a total of six armed home invasion robberies in the New Tampa (annexed territory in northeast Tampa) area. Once they made their way into the victims homes, they pistol whipped, threatened, and even beat one with a frying pan, before fleeing with various items from the victims homes. Investigation revealed that the escape vehicle was an orange Saturn Vue, registered to one of the defendant's girlfriends. Under real-time surveillance, the vehicle was followed by the police to 4223 River Hills Drive, where the defendants were observed kicking in the front door of the residence, flee with several items, and drive away. The defendants were apprehended a short distance away, still in possession of the stolen items from the burglary, including a gun stolen from the residence. Pinckney is serving a 10 year prison sentence.

Process Gap Analysis:

While at first review, this would appear to be a satisfactory ending, it could have potentially happened faster had there been more real-time situational awareness and case management, not only within the Tampa Police Department, but other areas. There were other cases discovered in the neighboring jurisdiction of the unincorporated area of Hillsborough County. There was a previous burglary connection to the defendants in 2007.

Had these data for these offenders, coupled with the evolving criminal pattern, been updated for both agencies in real-time, via a technological solution, the case could have been potentially solved faster—therefore avoiding additional offenses.

Table 12. Case Number: 2011–060120 and 11–381101

Agency: Tampa Police Department | Case Number: 2011–060120 and 11–381101

Case Summary:

Prior to **July of 2011**, Sharquay Knighton, DOB 4/3/95, had been arrested for residential burglary approximately a dozen times, including one a 4209 E. Curtis St in January 2011. In July 2011, he participated in a violent armed robbery of a female arriving home from work. As she attempted to walk to her apartment, she was confronted by several masked men, one of which threatened her with a rifle and demanded her purse. The victim's credit card was used a short time later at an ATM machine. Surveillance video captured Sharquay Knighton using the victim's card. Knighton was tried as an adult and is serving a seven year prison sentence.

Process Gap Analysis:

While this case was solved by having good offender knowledge and quick follow-up on the use of the victim's credit card, the example shows that the offender evolved into committing violent offenses.

By maintaining the case flow in a common operating picture, all functional investigators can have a timely understanding in the myriad of case-solving options for this particular case, related cases, and potentially future cases by the same defendant—or cohort.

Table 13. Case Number: 2010–532474

Case Summary:

Marterrance Holloway, DOB 8/15/79, has been arrested over 30 times for numerous crimes, including burglary and auto burglary. He has notoriously been known in the East Tampa area as a fence for stolen property. On **September 7, 2010**, District Three ROC officers received information that (wanted for violation of probation or VOP) Holloway, AKA "Quat," was in room 251 of the Howard Johnson motel. Upon arrival, a complete tax fraud operation was underway in the hotel room. Computers, ledgers, printers, Turbo-Tax processed refund cards, and other miscellaneous items were in plain view. Quat and other defendants were arrested. The defendants were turned over to the Secret Service for indictment

Process Gap Analysis:

By having street-level situational awareness of offenders, as well as current crime trends, the officers were able to arrest as well as recognize a federal tax crime, which was then investigated.. These tax crimes have led to additional investigations of money laundering and potential funding of terrorism groups outside the U.S.

There is an opportunity to house this case into a situational awareness solution, which would allow similar cases with this cross-offender to be rapidly resolved.

Table 14. Case Number: 2011–464806

Case Summary:

Rashad Cortez, DOB 2/12/87, was pulled over for a traffic infraction and found to not have a valid driver license. He was in possession of three "Green Dot" Turbo-Tax processed, refund debit cards in three different names. He told the officers that the people who the cards were issued to were his relatives. Further investigation revealed that these people were victims of identity theft and their taxes were filed fraudulently. Cortez was captured on surveillance video at ATMs and businesses using the Green Dot cards. Cortez, who has a history of burglary and auto theft, was charged with identity theft.

Process Gap Analysis:

This case exemplifies cross-offender status, as well as the illegal procurement of the refund cards (typically used domestically and internationally) that are under subsequent investigations for not only crimes in the U.S., but also concerns of money being sent overseas for illicit purposes.

This defines another opportunity to place the case management flow and offenders into a technological solution that would give more investigators real-time awareness for future or similar cases that have cross-offender status.

Table 15. Case Number: 2011–900497

Case Summary:

Jeff Borgelin, DOB 6/15/90, was pulled over for a traffic infraction and found to not have a valid driver license. He was in possession of numerous debit and credit cards that were not issued in his name. Investigation revealed that these persons were the victims of tax fraud and their income taxes were filed without their knowledge or permission. Borgelin was captured on surveillance video at several different business establishments and ATM machines using these fraudulently obtained cards. He was charged with identity theft and He has a burglary and auto burglary history.

Process Gap Analysis:

Is case demonstrates the cross-offender status, as well as the illegal procurement of the refund cards (typically used domestically and internationally) that are under subsequent investigations for not only crimes in the U.S., but also concerns of money being sent overseas for illicit purposes.

This defines another opportunity to place the case management flow and offenders into a solution that make more investigators have real-time awareness for future, similar cases that have cross-offender status.

C. SUMMARY/FINDINGS

These 15 case studies, with several aspects in common, demonstrated the varying degrees of operational success. To extrapolate, the most common denominator, which the correlation to a current or previous burglary case, demonstrates the need for cross-offender management at minimum within a situational awareness environment.

If there had been a supporting technological solution, offering real-time situational awareness inside one common operating picture, many of these cases may have been resolved even faster than they were through conventional information and

intelligence sharing and vetting. The mere reliance of more offenses to solve the current and previous cases forces an agency to review its investigative and information sharing processes.

If anyone in a law enforcement agency could see current crimes in real-time, while simultaneously seeing specific threads pertaining case management, developing intelligence trends, and have an overlay of potential offenders; then it seems that opportunities may avail themselves for solutions at a faster rate. This moves away from a centralized intelligence sharing and even beyond a decentralized platform into a fully distributed model.

While the crime of burglary was the nexus for this analysis, the fact that the offenders operated in different neighborhoods and committed other offenses shows the need for investigators and other key personnel to be more aware of evolving situations in the community.

For example, if the manager of the latent print process can see an emerging pattern, she can make a timely prioritization adjustment to process fingerprints more quickly on the original case. This requires all personnel to be dialed into a real-time situational awareness platform that synthesizes the current common operating picture with the ability to partition the information into manageable amounts of data. This can be done either geo-spatially or temporally for the best digestion and response.

In closing, using a distributive information platform to generate better situational awareness that processes and is available in real-time creates a common operating picture that allows the best opportunity to solve new crimes quickly. By solving crimes faster, new crimes and victims are prevented. Preventing more crime allows for the re-allocating police work toward proactive efforts. The availability of those front line resources could possibly result in the apprehension of potential terrorists doing those precursor crimes as described in historical case studies.

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V. QUANTITATIVE ANALYSIS

A. INTRODUCTION

Twenty-six United States cities were selected for this analysis. To correlate the cities' crime with homeland security, the 26 selected were part of the nation's Urban Area Security Initiative (UASI) Program. The three-year period selected was 2008 through 2010, which corresponds to UASI fiscal years 2009–2011. The crime for the method and analysis was burglary, and the purpose of burglary, as discussed qualitatively, was a sample of the array of the Federal Bureau of Investigation's Uniform Crime Reporting Part One Index Offenses. Uniform Quantitatively, burglary and burglary arrests, as compared by city size and available policing resources was examined. This served as a barometer of city security health and investigative processes related to speed in a given calendar year, and a baseline for potential, supporting technological opportunities. While not quantitatively integrated into the data scoring, it was noted in the data collection which cities rely on processes familiar to modern law enforcement, processes such as CompStat, Predictive Policing, Smart Policing, and Intel-led Policing and also supporting technologies to analyze and solve crime.

With a focus on burglary arrest ratio (by percentage) to demonstrate an agency's sub-focus on a property crime as a barometer of crime-health, a review of the national

^{72 &}quot;Urban Area Security Initiative Nonprofit Security Grant Program," Federal Emergency Management Agency, http://www.fema.gov/preparedness-non-disaster-grants/urban-areas-security-initiative-nonprofit-security-grant-program (accessed March 16, 2012).

^{73 &}quot;Safety Grants Directory," Mutualink, Inc., 2012, http://www.mutualink.net/DHS_2009_Urban_Area_Security_Initiative_List.asp (accessed March 16, 2012).

^{74 &}quot;Uniform Crime Reports," Federal Bureau of Investigation, http://www.fbi.gov/about-us/cjis/ucr/ucr (accessed March 16, 2012).

^{75 &}quot;Smart Policing Initiative," *BJA Fact Sheet*, Bureau of Justice Assistance, September 2009, http://www.smartpolicinginitiative.com/sites/default/files/BJA%20smart_policing_fact_sheet.pdf (accessed March 16, 2012).

statistics from 2008–2010 was done. This set a baseline of understanding prior to analyzing the 26 UASI cities. The Federal Bureau of Investigation's Uniform Crime Reporting Index was used for all three years.⁷⁶

In 2008, there were 2,042,369 reported burglaries nationwide, with estimated total arrests of 308,479 for that particular offense. The arrest percentage was 15.1 percent or one arrest for every 6.62 reported burglaries. In 2009, the offense increased over one percent nationwide for a total reported number of 2,063,466 with arrests estimated at 299,351, which is just below a three percent drop. This lowered the arrest percentage to 14.5 percent and yielded one arrest for every 6.89 burglaries. Lastly, 2010 burglaries nationwide dropped by over 37,000 reported offenses to 2,025,747, which translates to a reduction of 1.82 percent; however, arrests dropped again to 289,769, which lowered the arrest percentage to 14.3 percent with a ratio of one arrest for every 6.99 burglaries within the calendar year.

This data shows a three-year arrest percentage average of 14.63 percent and a ratio of one arrest for every 6.83 burglaries. While the arrest totals, as well as the percentages and ratios, decreased each year within 2008–2010 so did the overall crime of burglary.

Consider Tampa, FL in the same analytical review. The city averaged a 23.33 arrest percentage or one arrest for every 4.28 reported burglaries, which is almost 60 percent higher than the nationwide average. While reported burglaries dropped from 4,098 in 2008, to 3,501 in 2009 and to 3,131 by 2010; arrests also dropped from 923 in 2008, to 776 in 2009, and had a slight increase to 780 in 2010. While the arrest percentage and ratio was better in 2010 than 2008, moving from 23 to 25 percent, it went against the national trend, which went down slightly (15.1 in2008; 14.5 in2009; and 14.3 in2010) over the same three years. The key is to not let the efficiency rate (arrest percentage ratio) go down with the burglary rate so as to avoid a resurgence of the specific offense and potentially other crimes, including precursor crimes of terrorism.

^{76 &}quot;Uniform Crime Reports."

All data for the following analysis was readily available in open source information either directly or indirectly connected to each agency, and this analysis did not meet the criteria for an Institutional Review Board (IRB) at the Naval Postgraduate School.

B. AGENCIES

Table 16 shows the 26 UASI agencies that were sampled for the quantitative analysis within 2008–2010:

Table 16. Urban Area Security Initiative Data Sample Agencies⁷⁷

State	City
CALIFORNIA	Anaheim
GEORGIA	Atlanta
MARYLAND	Baltimore
MASSACHUSETTS	Boston
NORTH CAROLINA	Charlotte-Mecklenburg
Ohio	Cincinnati
OHIO	Cleveland
COLORADO	Denver
TEXAS	Houston
NEVADA	Las Vegas Metropolitan Police Department
FLORIDA	Miami
MINNESOTA	Minneapolis
VIRGINIA	Norfolk
FLORIDA	Orlando
PENNSYLVANIA	Philadelphia
ARIZONA	Phoenix
PENNSYLVANIA	Pittsburgh
OREGON	Portland
CALIFORNIA	Riverside
CALIFORNIA	San Diego
CALIFORNIA	San Francisco
WASHINGTON	Seattle
MISSOURI	St. Louis
MINNESOTA	St. Paul
Florida	Tampa
DISTRICT OF COLUMBIA	Washington

C. POPULATION

The 26 agencies and localities were first organized by city population. It was noted that on the lower end of city populations that the city of Orlando fell to the city of

⁷⁷ John Armao, *UASI Data Table of 26 Agencies: Burglary* (Tampa, FL: Tampa Police Department, July 10, 2012).

Norfolk between 2008 and 2009 as the smallest city in the sampling. In addition, the city of Philadelphia exchanged places with the city of Phoenix between 2009 and 2010 for the second-largest city in the sample data. The city of Tampa remained steady in rank throughout the period. Tables 17, 18, and 19 show data for 2010, 2009, and 2008, respectively.

There were a total of two cities that that remained below 250,000 (Orlando and Norfolk) within the data period. In addition, a total of 10 cities that remained above 250,000 but below 500,000 (St. Paul, Riverside, Pittsburg, Cincinnati, Anaheim, Tampa, St. Louis, Minneapolis, Cleveland, and Miami). A total of nine cities that remained above 500,000 but below one million (Atlanta, Portland, Washington, D.C., Denver, Seattle, Baltimore, Boston, Charlotte-Mecklenburg, and San Francisco). Moreover, five cities that remained over one million (San Diego, Las Vegas, Phoenix, Philadelphia, and Houston). Finally, the city of Tampa ranked the eighth smallest city by population for all three years of 2010, 2009, and 2008.

Table 17. 2010 by Population⁷⁸

State	City	Population
VIRGINIA	Norfolk	234,100
FLORIDA	Orlando	240,222
MINNESOTA	St. Paul	281,166
CALIFORNIA	Riverside	301,859
PENNSYLVANIA	Pittsburgh	312,737
Ohio	Cincinnati	332,365
CALIFORNIA	Anaheim	338,492
Florida	Tampa	347,830
MISSOURI	St. Louis	355,151
MINNESOTA	Minneapolis	385,704
OHIO	Cleveland	426,042
FLORIDA	Miami	440,482
GEORGIA	Atlanta	536,472
OREGON	Portland	564,392
DISTRICT OF COLUMBIA	Washington	601,723
COLORADO	Denver	607,051
WASHINGTON	Seattle	620,195
MARYLAND	Baltimore	639,929
MASSACHUSETTS	Boston	644,064
NORTH CAROLINA	Charlotte-Mecklenburg	797,733
CALIFORNIA	San Francisco	818,594
CALIFORNIA	San Diego	1,313,433
NEVADA	Las Vegas Metropolitan Police Department	1,416,401
ARIZONA	Phoenix	1,544,427
PENNSYLVANIA	Philadelphia	1,558,378
TEXAS	Houston	2,280,859

⁷⁸ Armao, "UASI Data Table of 26 Agencies."

Table 18. 2009 by Population⁷⁹

State	City	Population
VIRGINIA	Norfolk	235,097
FLORIDA	Orlando	235,109
MINNESOTA	St. Paul	280,194
CALIFORNIA	Riverside	299,871
PENNSYLVANIA	Pittsburgh	312,232
Ohio	Cincinnati	333,568
CALIFORNIA	Anaheim	335,970
Florida	Tampa	343,890
MISSOURI	St. Louis	355,208
MINNESOTA	Minneapolis	382,618
FLORIDA	Miami	419,205
OHIO	Cleveland	429,238
GEORGIA	Atlanta	552,901
OREGON	Portland	560,908
DISTRICT OF COLUMBIA	Washington	599,657
WASHINGTON	Seattle	602,531
COLORADO	Denver	604,680
MASSACHUSETTS	Boston	624,222
MARYLAND	Baltimore	638,755
NORTH CAROLINA	Charlotte-Mecklenburg	777,708
CALIFORNIA	San Francisco	809,755
CALIFORNIA	San Diego	1,314,773
NEVADA	Las Vegas Metropolitan Police Department	1,377,282
PENNSYLVANIA	Philadelphia	1,547,605
ARIZONA	Phoenix	1,597,397
TEXAS	Houston	2,273,771

⁷⁹ Armao, "UASI Data Table of 26 Agencies."

Table 19. 2008 by Population⁸⁰

State	City	Population
FLORIDA	Orlando	229,808
VIRGINIA	Norfolk	235,067
MINNESOTA	St. Paul	276,083
CALIFORNIA	Riverside	299,384
PENNSYLVANIA	Pittsburgh	309,757
Ohio	Cincinnati	332,608
CALIFORNIA	Anaheim	333,746
Florida	Tampa	336,911
MISSOURI	St. Louis	356,204
MINNESOTA	Minneapolis	376,753
FLORIDA	Miami	427,740
OHIO	Cleveland	433,452
GEORGIA	Atlanta	533,016
OREGON	Portland	553,023
DISTRICT OF COLUMBIA	Washington	591,833
COLORADO	Denver	592,881
WASHINGTON	Seattle	598,077
MASSACHUSETTS	Boston	604,465
MARYLAND	Baltimore	634,549
NORTH CAROLINA	Charlotte-Mecklenburg	758,769
CALIFORNIA	San Francisco	798,144
CALIFORNIA	San Diego	1,271,655
NEVADA	Las Vegas Metropolitan Police Department	1,353,175
PENNSYLVANIA	Philadelphia	1,441,117
ARIZONA	Phoenix	1,585,838
TEXAS	Houston	2,238,895

D. OFFICERS PER 1,000

Upon reviewing officers per capita, the data set stayed relatively the same between the years of 2009 and 2010. In 2009 and 2010, there were five cities below 2.0 officers per 1,000 residents; 12 cities settling above 2.0 but below 3.0 officers per 1,000⁸¹. In addition, in 2009 and 2010, there were nine cities at or above 3.0 officers per 1,000 residents. Washington, D.C., led the officer-to-resident ratio all three years with

⁸⁰ Armao, "UASI Data Table of 26 Agencies."

⁸¹ Ibid.

6.81 in 2008; 6.76 in 2009; and 6.56 in 2010.⁸² Two cities fell from 3.0 officers per 1,000 to below 3.0 per thousand between 2008 and 2009.⁸³ Furthermore, San Francisco fell from 3.0 officers per 1,000 in 2008 to 2.92 officers per 1,000 in 2009. Additionally, Atlanta went from 3.04 officers per 1,000 from 2008 to 2.72 officers per 1,000 in 2009and then bounced back in 2010 reaching 3.0 officers per 1,000 residents as compared to the previous year. The city of Tampa's officer-to-citizen ratio was reduced by almost six percent between the years of 2008 and 2010. Tables, 20, 21, and 22 list the officers per 1,000 by UASI city for 2010, 2009, and 2008, respectively.

Table 20. Table 2010 Officers per 1,00084

				Ofc.per
			Number of	1000
State	City	Population	Officers	Residents
CALIFORNIA	Anaheim	338,492	389	1.15
CALIFORNIA	Riverside	301,859	361	1.20
CALIFORNIA	San Diego	1,313,433	1863	1.42
OREGON	Portland	564,392	957	1.70
NEVADA	Las Vegas Metropolitan Police Department	1,416,401	2696	1.90
ARIZONA	Phoenix	1,544,427	3146	2.04
MINNESOTA	St. Paul	281,166	592	2.11
NORTH CAROLINA	Charlotte-Mecklenburg	797,733	1696	2.13
WASHINGTON	Seattle	620,195	1344	2.17
MINNESOTA	Minneapolis	385,704	880	2.28
TEXAS	Houston	2,280,859	5351	2.35
COLORADO	Denver	607,051	1470	2.42
FLORIDA	Miami	440,482	1098	2.49
Florida	Tampa	347,830	952	2.74
CALIFORNIA	San Francisco	818,594	2250	2.75
PENNSYLVANIA	Pittsburgh	312,737	887	2.84
FLORIDA	Orlando	240,222	719	2.99
GEORGIA	Atlanta	536,472	1612	3.00
VIRGINIA	Norfolk	234,100	759	3.24
MASSACHUSETTS	Boston	644,064	2094	3.25
Ohio	Cincinnati	332,365	1090	3.28
OHIO	Cleveland	426,042	1559	3.66
MISSOURI	St. Louis	355,151	1363	3.84
PENNSYLVANIA	Philadelphia	1,558,378	6734	4.32
MARYLAND	Baltimore	639,929	2960	4.63
DISTRICT OF COLUMBIA	Washington	601,723	3945	6.56

⁸² Ibid.

⁸³ Armao, "UASI Data Table of 26 Agencies."

⁸⁴ Ibid.

Table 21. 2009 Officers per 1,000

State	City	Population	Number of Officers	Ofc.per 1000 Residents
CALIFORNIA	Anaheim	335,970	405	1.21
CALIFORNIA	Riverside	299,871	370	1.23
CALIFORNIA	San Diego	1,314,773	1894	1.44
OREGON	Portland	560,908		1.71
NEVADA	Las Vegas Metropolitan Police Department	1,377,282	2735	1.99
ARIZONA	Phoenix	1,597,397	3279	2.05
NORTH CAROLINA	Charlotte-Mecklenburg	777,708	1635	2.10
MINNESOTA	St. Paul	280,194	614	2.19
WASHINGTON	Seattle	602,531	1351	2.24
MINNESOTA	Minneapolis	382,618	888	2.32
TEXAS	Houston	2,273,771	5371	2.36
COLORADO	Denver	604,680	1510	2.50
FLORIDA	Miami	419,205	1124	2.68
GEORGIA	Atlanta	552,901	1506	2.72
Florida	Tampa	343,890	964	2.80
CALIFORNIA	San Francisco	809,755	2367	2.92
PENNSYLVANIA	Pittsburgh	312,232	914	2.93
FLORIDA	Orlando	235,109	725	3.08
VIRGINIA	Norfolk	235,097	755	3.21
Ohio	Cincinnati	333,568	1113	3.34
MASSACHUSETTS	Boston	624,222	2177	3.49
OHIO	Cleveland	429,238		3.83
MISSOURI	St. Louis	355,208	1408	3.96
PENNSYLVANIA	Philadelphia	1,547,605	6722	4.34
MARYLAND	Baltimore	638,755	3013	4.72
DISTRICT OF COLUMBIA	Washington	599,657	4052	6.76

Table 22. 2008 Officers per 1,00085

			Ni wahan af	Ofc.per
State	City	Population	Number of Officers	1000 Residents
CALIFORNIA	Anaheim	333.746	424	1.27
CALIFORNIA	Riverside	299.384	385	1.29
CALIFORNIA	San Diego	1,271,655	1,987	1.56
OREGON	Portland	553,023	989	1.79
NEVADA	Las Vegas Metropolitan Police Department	1,353,175	2,530	1.87
ARIZONA	Phoenix	1,585,838	3,351	2.11
NORTH CAROLINA	Charlotte-Mecklenburg	758,769	1,637	2.16
MINNESOTA	St. Paul	276,083	598	2.17
WASHINGTON	Seattle	598,077	1,318	2.20
TEXAS	Houston	2,238,895	5,048	2.25
MINNESOTA	Minneapolis	376,753	891	2.36
FLORIDA	Miami	427,740	1,073	2.51
COLORADO	Denver	592,881	1,541	2.60
PENNSYLVANIA	Pittsburgh	309,757	850	2.74
Florida	Tampa	336,911	979	2.91
CALIFORNIA	San Francisco	798,144	2,391	3.00
GEORGIA	Atlanta	533,016	1,619	3.04
FLORIDA	Orlando	229,808	740	3.22
VIRGINIA	Norfolk	235,067	757	3.22
Ohio	Cincinnati	332,608	1,083	3.26
MASSACHUSETTS	Boston	604,465	2,213	3.66
OHIO	Cleveland	433,452	1,613	3.72
MISSOURI	St. Louis	356,204	1,405	3.94
PENNSYLVANIA	Philadelphia	1,441,117	6,764	4.69
MARYLAND	Baltimore	634,549	2,998	4.72
DISTRICT OF COLUMBIA	Washington	591,833	4,030	6.81

E. CRIME RANKING

Crime ranking within 2010, 2009, and 2008 was not within the selected (data) cities, but within the national rankings of all cities available. 86 In 2010, there were nine (UASI) cities within the top 50 cities nationwide in highest crime. St. Louis, Cleveland, and Baltimore led each year respectively as the cities with the highest crime in the data set. In 2009 and 2008, two additional cities joined the other nine to be in the top 50 nationwide for highest crime. The city of Miami made the cut both years for the top 50 and the city of Houston made it in 2008, and the city of Pittsburg made it in 2009.

⁸⁵ Armao, "UASI Data Table of 26 Agencies."

^{86 &}quot;City Crime Rankings 2009–2010," CQ Press, 2009, http://os.cqpress.com/citycrime/2009/CityCrimeRankings2009.htm (accessed March 16, 2012).

Four of the 26 cities remained in the top 50–100 ranking in 2010; however it increased to five cities in the previous years of 2009 and 2008. The years 2008 and 2009 also showed nine cities holding the rankings in-between 100–200; that jumped to 11 for 2010. Only two cities (Anaheim and San Diego) were ranked above 200 in 2010, but that was better than only one each year in 2009 and 2008—which proved to be Anaheim both years.

The city of Tampa jumped from 105 in 2008, to 122 in 2009, settling at 155 by 2010; showing an over 47 percent improvement within the three calendar years. Tables 23, 24, and 25 show crime rankings for 2010, 2009, and 2008.

Table 23. 2010 Crime Ranking⁸⁷

City	<u>Population</u>	Officers	Residents	Burglaries	1000 residents	Arrests	Ratio	Crime Ranking
St. Louis	355,151	1363	3.84	6,705	18.88	942	14%	1
Cleveland	426,042	1559	3.66	9,854	23.13	1393	14%	7
Baltimore	639,929	2960	4.63	7,573	11.83	1275	17%	11
Washington	601,723	3945	6.56	4,224	7.02	331	8%	22
Cincinnati	332,365	1090	3.28	6,490	19.53	797	12%	24
Atlanta	536,472	1612	3.00	8,016	14.94	891	11%	25
Houston	2,280,859	5351	2.35	27,924	12.24	1440	5%	45
Orlando	240,222	719	2.99	4,015	16.71	350	9%	46
Minneapolis	385,704	880	2.28	4,787	12.41	269	6%	48
Miami	440,482	1098	2.49	4,604	10.45	487	11%	51
Philadelphia	1,558,378	6734	4.32	10,796	6.93	1699	16%	70
Las Vegas Metropolitan Police Department	1,416,401	2696	1.90	13,824	9.76	1283	9%	76
Pittsburgh	312,737	887	2.84	2,949	9.43	458	16%	82
St. Paul	281,166	592	2.11	2,883	10.25	190	7%	102
Norfolk	234,100	759	3.24	2,158	9.22	166	8%	102
Boston	644,064	2094	3.25	3,587	5.57	566	16%	113
Charlotte-Mecklenburg	797,733	1696	2.13	9,325	11.69	1165	12%	118
San Francisco	818,594	2250	2.75	4,557	5.57	1588	35%	130
Phoenix	1,544,427	3146	2.04	15,626	10.12			135
Denver	607,051	1470	2.42	4,501	7.41	583	13%	141
Tampa	347,830	952	2.74	3,131	9.00	780	25%	155
Seattle	620,195	1344	2.17	6,449	10.40	513	8%	157
Portland	564,392	957	1.70	4,120	7.30	375	9%	174
Riverside	301,859	361	1.20	2,068	6.85			191
San Diego	1,313,433	1863	1.42	6,387	4.86	1492	23%	221
Anaheim	338,492	389	1.15	1,594	4.71	503	32%	280

⁸⁷ Armao, "UASI Data Table of 26 Agencies."

Table 24. 2009 Crime Ranking⁸⁸

1	į.	of	1000	Number of	Burglaries per	Burglary	Burglary	Crime
City	Population	Officers	Residents	Burglaries	1000 Residents	Arrests	Ratio	Ranking
St. Louis	355,208	1408	3.96	6834	19.24	1011	15%	2
Cleveland	429,238	1642	3.83	9226	21.49	1258	14%	8
Baltimore	638,755	3013	4.72	7798	12.21	1262	16%	13
Washington	599,657	4052	6.76	3696	6.16	314	8%	16
Orlando	235,109	725	3.08	3770	16.04	414	11%	17
Atlanta	552,901	1506	2.72	9112	16.48	911	10%	18
Cincinnati	333,568	1113	3.34	6287	18.85	922	15%	19
Philadelphia	1,547,605	6722	4.34	10969	7.09	1527	14%	21
Minneapolis	382,618	888	2.32	4741	12.39	338	7%	30
Miami	419,205	1124	2.68	4856	11.58	521	11%	45
Pittsburgh	312,232	914	2.93	2811	9.00	376	13%	48
Houston	2,273,771	5371	2.36	29279	12.88	1509	5%	57
Las Vegas Metropolitan Police Department	1,377,282	2735	1.99	13512	9.81	1088	8%	67
Charlotte-Mecklenburg	777,708	1635	2.10	9817	12.62	1161	12%	70
Phoenix	1,597,397	3279	2.05	16281	10.19	1375	8%	92
San Francisco	809,755	2367	2.92	5197	6.42	775	15%	93
Boston	624,222	2177	3.49	2955	4.73	580	20%	104
Norfolk	235,097	755	3.21	2078	8.84	101	5%	105
St. Paul	280,194	614	2.19	2929	10.45	258	9%	112
Tampa	343,890	964	2.80	3501	10.18	776	22%	122
Denver	604,680	1510	2.50	4763	7.88	681	14%	167
Portland	560,908	957	1.71	3696	6.59	300	8%	173
Riverside	299,871	370	1.23	2020	6.74	505	25%	174
Seattle	602,531	1351	2.24	6709	11.13	390	6%	183
San Diego	1,314,773	1894	1.44	6693	5.09	1513	23%	191
Anaheim	335,970	405	1.21	1457	4.34	517	35%	268

Table 25. 2008 Crime Ranking⁸⁹

I		Number of	<u>1000</u>	Number of	Burglaries per	Burglary	Burglary	Crime
City	Population	Officers	Residents	<u>Burglaries</u>	1000 Residents	<u>Arrests</u>	<u>Ratio</u>	Ranking
St. Louis	356,204	1,405	3.94	7274	20.42	1090	15%	4
Cleveland	433,452	1,613	3.72	9102	21.00	1289	14%	11
Baltimore	634,549	2,998	4.72	7832	12.34	1300	17%	12
Atlanta	533,016	1,619	3.04	9989	18.74	1137	11%	16
Orlando	229,808	740	3.22	4279	18.62	433	10%	18
Minneapolis	376,753	891	2.36	5591	14.84	439	8%	20
Washington	591,833	4,030	6.81	3781	6.39	379	10%	21
Philadelphia	1,441,117	6,764	4.69	12845	8.91	2034	16%	22
Cincinnati	332,608	1,083	3.26	6330	19.03	893	14%	28
Miami	427,740	1,073	2.51	4941	11.55	638	13%	35
Houston	2,238,895	5,048	2.25	26947	12.04	1231	5%	48
Las Vegas Metropolitan Police Department	1,353,175	2,530	1.87	14902	11.01	1337	9%	56
Pittsburgh	309,757	850	2.74	3108	10.03	449	14%	61
Charlotte-Mecklenburg	758,769	1,637	2.16	11933	15.73	1110	9%	62
Phoenix	1,585,838	3,351	2.11	18783	11.84	1744	9%	65
Norfolk	235,067	757	3.22	1868	7.95	117	6%	87
Boston	604,465	2,213	3.66	3493	5.78	698	20%	100
San Francisco	798,144	2,391	3.00	5401	6.77	1110	21%	102
Tampa	336,911	979	2.91	4098	12.16	923	23%	105
St. Paul	276,083	598	2.17	2936	10.63	314	11%	113
Denver	592,881	1,541	2.60	5173	8.73	779	15%	129
Portland	553,023	989	1.79	4307	7.79	391	9%	141
Seattle	598,077	1,318	2.20	6503	10.87	355	5%	165
San Diego	1,271,655	1,987	1.56	7743	6.09	1522	20%	184
Riverside	299,384	385	1.29	2208	7.38	416	19%	190
Anaheim	333,746	424	1.27	1,604	4.81	515	32%	236

⁸⁸ Armao, "UASI Data Table of 26 Agencies."

⁸⁹ Ibid.

F. BURGLARY RATE

Beyond assessing UASI cities in the sampling—which would those jurisdictions having greater homeland security risk—the core data was centered on the UCR Part One Offense of Burglary. Each city was measured for both their total reported burglaries and their total burglaries per 1,000 residents for the years of 2010, 2009, and 2008. As described in the qualitative analysis chapter, burglary would be those offenses that met the UCR Part One definition for reporting, above the state statute for the affected locality.⁹⁰

In 2010, 13 UASI cities, led by Anaheim, were under 10 burglaries per 1,000 residents. This was better than 12 in 2009 and 10 in 2008. Respectively, there were 12 UASI cities in-between 10 and 20 burglaries in 2010 per 1,000, which was one city better than the 13 in 2009, and two better than the 14 cities in 2008. One city, Cleveland had over 20 burglaries per 1,000 residents in 2010 and 2009, but was joined by St. Louis in 2008.

The city of Tampa progressed from 12.16 burglaries per 1,000 residents in 2008, down to 9.0 burglaries per 1,000 residents in 2010an improvement of 25 percent within the subsequent two years or approximately three less burglaries per 1,000 residents. This moved the city of Tampa from eighteenth in 2008 to tenth lowest within the studied cities within the time line.

Tables 26, 27, and 28 give burglary rates for 2010, 2009, and 2008, respectively.

⁹⁰ "Uniform Crime Reports," *Crime in the United States*, The Federal Bureau of Investigation, http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/property-crime/burglarymain, Accessed March 16, 2012.

Table 26. 2010 Burglary Rate

			Ofc.per		Number of
		Number of	1000	Number of	Burglaries per
City	<u>Population</u>	Officers	Residents	Burglaries	1000 residents
Anaheim	338,492	389	1.15	1,594	4.71
San Diego	1,313,433	1863	1.42	6,387	4.86
San Francisco	818,594	2250	2.75	4,557	5.57
Boston	644,064	2094	3.25	3,587	5.57
Riverside	301,859	361	1.20	2,068	6.85
Philadelphia	1,558,378	6734	4.32	10,796	6.93
Washington	601,723	3945	6.56	4,224	7.02
Portland	564,392	957	1.70	4,120	7.30
Denver	607,051	1470	2.42	4,501	7.41
Tampa	347,830	952	2.74	3,131	9.00
Norfolk	234,100	759	3.24	2,158	9.22
Pittsburgh	312,737	887	2.84	2,949	9.43
Las Vegas Metropolitan Police Department	1,416,401	2696	1.90	13,824	9.76
Phoenix	1,544,427	3146	2.04	15,626	10.12
St. Paul	281,166	592	2.11	2,883	10.25
Seattle	620,195	1344	2.17	6,449	10.40
Miami	440,482	1098	2.49	4,604	10.45
Charlotte-Mecklenburg	797,733	1696	2.13	9,325	11.69
Baltimore	639,929	2960	4.63	7,573	11.83
Houston	2,280,859	5351	2.35	27,924	12.24
Minneapolis	385,704	880	2.28	4,787	12.41
Atlanta	536,472	1612	3.00	8,016	14.94
Orlando	240,222	719	2.99	4,015	16.71
St. Louis	355,151	1363	3.84	6,705	18.88
Cincinnati	332,365	1090	3.28	6,490	19.53
Cleveland	426,042	1559	3.66	9,854	23.13

Table 27. 2009 Burglary Rate⁹¹

City	Population	Number of Officers	Ofc.per 1000 Residents	Number of Burglaries	Number of Burglaries per 1000 Residents
Anaheim	335,970		1.21	1457	4.34
Boston	624,222		3.49	2955	4.73
San Diego	1,314,773		1.44	6693	5.09
Washington	599.657	4052	6.76	3696	6.16
San Francisco	809.755	2367	2.92	5197	6.42
Portland	560,908		1.71	3696	6.59
Riverside	299,871		1.23	2020	6.74
Philadelphia	1,547,605		4.34	10969	7.09
Denver	604.680		2.50	4763	7.88
Norfolk	235,097	755	3.21	2078	8.84
Pittsburgh	312,232	914	2.93	2811	9.00
Las Vegas Metropolitan Police Department	1,377,282	2735	1.99	13512	9.81
Tampa	343,890	964	2.80	3501	10.18
Phoenix	1,597,397	3279	2.05	16281	10.19
St. Paul	280,194	614	2.19	2929	10.45
Seattle	602,531	1351	2.24	6709	11.13
Miami	419,205	1124	2.68	4856	11.58
Baltimore	638,755	3013	4.72	7798	12.21
Minneapolis	382,618	888	2.32	4741	12.39
Charlotte-Mecklenburg	777,708	1635	2.10	9817	12.62
Houston	2,273,771	5371	2.36	29279	12.88
Orlando	235,109	725	3.08	3770	16.04
Atlanta	552,901	1506	2.72	9112	16.48
Cincinnati	333,568	1113	3.34	6287	18.85
St. Louis	355,208	1408	3.96	6834	19.24
Cleveland	429,238	1642	3.83	9226	21.49

⁹¹ Armao, "UASI Data Table of 26 Agencies."

Table 28. 2008 Burglary Rate⁹²

		Number of	Ofc.per 1000	Number of	Number of Burglaries per
<u>City</u>	<u>Population</u>	<u>Officers</u>	Residents	<u>Burglaries</u>	1000 Residents
Anaheim	333,746	424	1.27	1,604	4.81
Boston	604,465	2,213		3493	5.78
San Diego	1,271,655	1,987	1.56	7743	6.09
Washington	591,833	4,030	6.81	3781	6.39
San Francisco	798,144	2,391	3.00	5401	6.77
Riverside	299,384	385	1.29	2208	7.38
Portland	553,023	989	1.79	4307	7.79
Norfolk	235,067	757	3.22	1868	7.95
Denver	592,881	1,541	2.60	5173	8.73
Philadelphia	1,441,117	6,764	4.69	12845	8.91
Pittsburgh	309,757	850	2.74	3108	10.03
St. Paul	276,083	598	2.17	2936	10.63
Seattle	598,077	1,318	2.20	6503	10.87
Las Vegas Metropolitan Police Department	1,353,175	2,530	1.87	14902	11.01
Miami	427,740	1,073	2.51	4941	11.55
Phoenix	1,585,838	3,351	2.11	18783	11.84
Houston	2,238,895	5,048	2.25	26947	12.04
Tampa	336,911	979	2.91	4098	12.16
Baltimore	634,549	2,998	4.72	7832	12.34
Minneapolis	376,753	891	2.36	5591	14.84
Charlotte-Mecklenburg	758,769	1,637	2.16	11933	15.73
Orlando	229,808	740	3.22	4279	18.62
Atlanta	533,016	1,619	3.04	9989	18.74
Cincinnati	332,608	1,083	3.26	6330	19.03
St. Louis	356,204	1,405	3.94	7274	20.42
Cleveland	433,452	1,613	3.72	9102	21.00

G. BURGLARY ARREST RATIO

Ultimately, the focus of the quantitative analysis is on this metadata. This is not case-closing data, but specifically the number of burglary arrests made against the number of burglaries that were reported via the FBI's UCR Part One Index, regardless of the association or disassociation to each case. Specifically, while we know each burglary occurred in a specific year and the total arrests happened in the same calendar year—it does not mean that the arrest is directly connected with burglaries that occurred in the identified year. What it does mean is that a burglar was arrested, and it can theoretically be associated with:

⁹² Armao, "UASI Data Table of 26 Agencies."

- 1. The cities' burglary rate per 1,000 residents,
- 2. Their overall crime ranking and
- 3. Potentially a component of the cities' overall crime and homeland security health.

In 2008, there were eight cities that had less than a 10 percent arrest ratio to reported offenses, as compared to nine in years 2009 and 2010. The year 2008 also had 13 UASI cities sitting between 10 and 20 percent, while 2009 had 12 and 2010 had 11. While both 2008 and 2009 showed five cities that were above a 20 percent arrest-to-report ratio for burglary, only 2010 had data for three cities, as Riverside and Phoenix did not have the arrest totals available for the given year. The city of Tampa improved from an arrest ratio of 23 percent in 2008, to 25 percent in 2010 or an arrest in one of every four burglaries that occurred that year.

Tables 29, 30, and 31 give the burglary arrest ratio for 2010, 2009, and 2008, respectively.

Table 29. 2010 Burglary Arrest Ratio⁹³

			Ofc.per		Number of	Number of	Arrest to
		Number of	1000	Number of	Burglaries per	Burglary	Burglary
<u>City</u>	Population	<u>Officers</u>	Residents	<u>Burglaries</u>	1000 residents	<u>Arrests</u>	<u>Ratio</u>
Houston	2,280,859	5351	2.35	27,924	12.24	1440	5%
Minneapolis	385,704	880	2.28	4,787	12.41	269	6%
St. Paul	281,166	592	2.11	2,883	10.25	190	7%
Norfolk	234,100	759	3.24	2,158	9.22	166	8%
Washington	601,723	3945	6.56	4,224	7.02	331	8%
Seattle	620,195	1344	2.17	6,449	10.40	513	8%
Orlando	240,222	719	2.99	4,015	16.71	350	9%
Portland	564,392	957	1.70	4,120	7.30	375	9%
Las Vegas Metropolitan Police Department	1,416,401	2696	1.90	13,824	9.76	1283	9%
Miami	440,482	1098	2.49	4,604	10.45	487	11%
Atlanta	536,472	1612	3.00	8,016	14.94	891	11%
Cincinnati	332,365	1090	3.28	6,490	19.53	797	12%
Charlotte-Mecklenburg	797,733	1696	2.13	9,325	11.69	1165	12%
Denver	607,051	1470	2.42	4,501	7.41	583	13%
St. Louis	355,151	1363	3.84	6,705	18.88	942	14%
Cleveland	426,042	1559	3.66	9,854	23.13	1393	14%
Pittsburgh	312,737	887	2.84	2,949	9.43	458	16%
Philadelphia	1,558,378	6734	4.32	10,796	6.93	1699	16%
Boston	644,064	2094	3.25	3,587	5.57	566	16%
Baltimore	639,929	2960	4.63	7,573	11.83	1275	17%
San Diego	1,313,433	1863	1.42	6,387	4.86	1492	23%
Tampa	347,830	952	2.74	3,131	9.00	780	25%
Anaheim	338,492	389	1.15	1,594	4.71	503	32%
San Francisco	818,594	2250	2.75	4,557	5.57	1588	35%
Riverside	301,859	361	1.20	2,068	6.85		
Phoenix	1,544,427	3146	2.04	15,626	10.12		

⁹³ Armao, "UASI Data Table of 26 Agencies."

Table 30. 2009 Burglary Arrest Ratio⁹⁴

Cit.	Damulatian	Number of	Ofc.per 1000	Number of	Number of Burglaries per	Number of Burglary	Arrest to Burglary
<u>City</u> Norfolk	Population 235.097	755	3.21	Burglaries 2078	1000 Residents 8.84	Arrests 101	Ratio 5%
Houston	2,273,771	5371	2.36	29279	12.88	1509	5%
Seattle	602,531	1351	2.24	6709	11.13	390	6%
Minneapolis	382,618		2.32	4741	12.39	338	7%
Phoenix	1.597.397	3279	2.05	16281	10.19	1375	8%
Las Vegas Metropolitan Police Department	1,377,282		1.99	13512	9.81	1088	8%
Portland	560,908	957	1.71	3696	6.59	300	8%
Washington	599,657	4052	6.76	3696	6.16	314	8%
St. Paul	280,194	614	2.19	2929	10.45	258	9%
Atlanta	552,901	1506	2.72	9112	16.48	911	10%
Miami	419,205	1124	2.68	4856	11.58	521	11%
Orlando	235,109	725	3.08	3770	16.04	414	11%
Charlotte-Mecklenburg	777,708	1635	2.10	9817	12.62	1161	12%
Pittsburgh	312,232	914	2.93	2811	9.00	376	13%
Cleveland	429,238	1642	3.83	9226	21.49	1258	14%
Philadelphia	1,547,605	6722	4.34	10969	7.09	1527	14%
Denver	604,680	1510	2.50	4763	7.88	681	14%
Cincinnati	333,568	1113	3.34	6287	18.85	922	15%
St. Louis	355,208	1408	3.96	6834	19.24	1011	15%
San Francisco	809,755	2367	2.92	5197	6.42	775	15%
Baltimore	638,755	3013	4.72	7798	12.21	1262	16%
Boston	624,222	2177	3.49	2955	4.73	580	20%
Tampa	343,890	964	2.80	3501	10.18	776	22%
San Diego	1,314,773	1894	1.44	6693	5.09	1513	23%
Riverside	299,871	370	1.23	2020	6.74	505	25%
Anaheim	335,970	405	1.21	1457	4.34	517	35%

⁹⁴ Armao, "UASI Data Table of 26 Agencies."

Table 31. 2008 Burglary Arrest Ratio⁹⁵

							Burglary
			Ofc.per		Number of	Number of	Arrest to
		Number of	1000	Number of	Burglaries per	Burglary	Burglary
City	Population	Officers	Residents	Burglaries	1000 Residents	Arrests	Ratio
Houston	2,238,895	5,048	2.25	26947	12.04	1231	5%
Seattle	598,077	1,318	2.20	6503	10.87	355	5%
Norfolk	235,067	757	3.22	1868	7.95	117	6%
Minneapolis	376,753	891	2.36	5591	14.84	439	8%
Las Vegas Metropolitan Police Department	1,353,175	2,530	1.87	14902	11.01	1337	9%
Phoenix	1,585,838	3,351	2.11	18783	11.84	1744	9%
Portland	553,023	989	1.79	4307	7.79	391	9%
Charlotte-Mecklenburg	758,769	1,637	2.16	11933	15.73	1110	9%
Washington	591,833	4,030	6.81	3781	6.39	379	10%
Orlando	229,808	740	3.22	4279	18.62	433	10%
St. Paul	276,083	598	2.17	2936	10.63	314	11%
Atlanta	533,016	1,619	3.04	9989	18.74	1137	11%
Miami	427,740	1,073	2.51	4941	11.55	638	13%
Cincinnati	332,608	1,083	3.26	6330	19.03	893	14%
Cleveland	433,452	1,613	3.72	9102	21.00	1289	14%
Pittsburgh	309,757	850	2.74	3108	10.03	449	14%
St. Louis	356,204	1,405	3.94	7274	20.42	1090	15%
Denver	592,881	1,541	2.60	5173	8.73	779	15%
Philadelphia	1,441,117	6,764	4.69	12845	8.91	2034	16%
Baltimore	634,549	2,998	4.72	7832	12.34	1300	17%
Riverside	299,384	385	1.29	2208	7.38	416	19%
San Diego	1,271,655	1,987	1.56	7743	6.09	1522	20%
Boston	604,465	2,213	3.66	3493	5.78	698	20%
San Francisco	798,144	2,391	3.00	5401	6.77	1110	21%
Tampa	336,911	979	2.91	4098	12.16	923	23%
Anaheim	333,746	424	1.27	1,604	4.81	515	32%

H. CORRELATIONS

Upon reviewing the metadata within the sample jurisdictions, the analytical purpose was to demonstrate a correlation between local crime-health by using a ratio of burglary related arrests within a given calendar year as a barometer of speed and investigative efficiency. This last data sort was designed to filter each agency first for crime ranking; then burglary arrest ratio; then finally overall burglary rate.

1. Burglary Arrest Ratio and Crime Ranking

From 2008 to 2010, no city that ranked in the top 100 for crime had a burglary arrest ratio that reached 20 percent. The best city in 2010 was Baltimore with a 17 percent burglary arrest ratio and ranked number 11 in crime, followed by Philadelphia and Pittsburgh having a 16 percent burglary arrest ratio. The two cities have crime rankings of 70 and 82, respectively.

⁹⁵ Ibid.

Using the same approach for 2009, Baltimore had the top burglary arrest rate for a city ranking in the top 100 for overall part one UCR crime. Three cities in the top 100 for crime reached a 15 percent burglary arrest rate: St. Louis, ranking number two in the nation for overall part one UCR crime that year; Cincinnati ranking nineteenth in the nation; and San Francisco holding the position of ninety-third.

Baltimore, in 2008, had a 17 percent burglary arrest ratio and held the overall, part one UCR crime rank of twelfth in the U.S. Philadelphia's burglary arrest ratio was 16 percent, but its crime ranking was 22. St. Louis was ranked number four in the U.S. for overall, part one 96 UCR crime, but managed to have a 15 percent arrest ratio for the year.

The cities between 2008 and 2010 that reached a 20 percent or higher burglary arrest ratio were as follows.

a. 2010

In 2010, San Francisco had a 35 percent arrest ratio and a crime ranking of 130. Additionally, Tampa had a 25 percent arrest ratio and a crime ranking of 155 while San Diego had a 23 percent arrest ratio and a crime ranking of 221. Finally, Anaheim had a 32 percent burglary arrest ratio with a nationwide, part one UCR crime ranking of 280. It should be noted that both Phoenix and Riverside had no burglary arrest data available for this calendar year, but they ranked 135 and 191 in overall crime with a burglary rate of 10.12 per 1,000 and 6.85 per 1,000.

b. 2009

In 2009, the cities that had 20 percent or better in burglary arrest ratios within the calendar year were: Boston, with 20 percent and a crime ranking of 104; Tampa, with a 22 percent burglary arrest ratio and a part one UCR crime rank of 122; Riverside, with a 25 percent arrest ratio and a crime rank of 174; and, finally, San Diego

⁹⁶ Armao, "UASI Data Table of 26 Agencies."

and Anaheim, having a burglary arrest ratio of 23 and 32 percent, while holding the crime rankings of 191 and 268, respectively.

c. 2008

In 2008, the best cities in the earliest sample year of 100 and better in overall, part one UCR crime ranking in the U.S. were: Boston, with a burglary arrest ratio of 20 percent and holding the number 100 spot; San Francisco, having an arrest ratio of 21 percent and a crime ranking of 102; Tampa, having an arrest ratio of 23 percent and a crime ranking of 105; San Diego, having an arrest ratio of 20 percent and a crime ranking of 184; and, finally, Anaheim, with an arrest ratio of 32 percent and a national crime ranking in that year of 236.

d. Anomalies 2008–2010

In 2010, Seattle and Portland had good crime rankings of 157 and 174, respectively, yet only had a burglary arrest ratios of eight and nine percent, respectively. Denver also was in this anomalistic net with a 13 percent burglary arrest ratio but held a respectable crime ranking of 141. In addition, Norfolk with a five percent burglary arrest ratio held the nation's 105 spot for 2009, followed by St. Paul with a nine percent arrest ratio and a 112 crime ranking. Both Portland and Seattle showed an eight and six percent arrest ratio for burglary but managed to be at 173 and 183, respectively, in overall, part one UCR crime. Again, Portland and Seattle in 2008 show an arrest ratio of below 10 percent in burglary for the year (nine and five percent), while holding the positions of 141 and 165 nationwide as it pertains to overall part one UCR crime for the year.

Resorting back to the nationwide burglary data, it is noted that only eight UASI cities were above the national arrest percentage and ratio in 2010, with nine in 2009, and 10 in 2008. It is this loss of efficiency momentum that a technological support system could potentially help to prevent.

One common denominator within these anomalies, (although not married with scientific data) as it relates to those cities with relatively lower crime rates (>100 among all U.S. cities), is that they all tend to have harsh winters. This may

(speculatively) have an impact on overall crime, as compared to a city like Tampa, which has a sub-tropical climate year round making it seasonally ripe to do crime all 12 months in addition to combating tourism influx.

Table 32. 2010 Sorted by Crime Ranking; Then Burglary Arrest Ratio; Then Burglary Rate⁹⁷

			Number of	Ofc.per	Number of	Number of Burglaries per	Number of Burglary	Burglary Arrest to Burglary	
State	City	Population	Officers	Residents	Burglaries	1000 residents	Arrests	Ratio	Crime Ranking
MISSOURI	St. Louis	355,151	1363	3.84	6,705	18.88	942	14%	1
OHIO	Cleveland	426,042	1559	3.66	9,854	23.13	1393	14%	7
MARYLAND	Baltimore	639,929	2960	4.63	7,573	11.83	1275	17%	11
DISTRICT OF COLUMBIA	Washington	601,723	3945	6.56	4,224	7.02	331	8%	22
Ohio	Cincinnati	332,365	1090	3.28	6,490	19.53	797	12%	24
GEORGIA	Atlanta	536,472	1612	3.00	8,016	14.94	891	11%	25
TEXAS	Houston	2,280,859	5351	2.35	27,924	12.24	1440	5%	45
FLORIDA	Orlando	240,222	719	2.99	4,015	16.71	350	9%	46
MINNESOTA	Minneapolis	385,704	880	2.28	4,787	12.41	269	6%	48
FLORIDA	Miami	440,482	1098	2.49	4,604	10.45	487	11%	51
PENNSYLVANIA	Philadelphia	1,558,378	6734	4.32	10,796	6.93	1699	16%	70
NEVADA	Las Vegas Metropolitan Police Department	1,416,401	2696	1.90	13,824	9.76	1283	9%	76
PENNSYLVANIA	Pittsburgh	312,737	887	2.84	2,949	9.43	458	16%	82
MINNESOTA	St. Paul	281,166	592	2.11	2,883	10.25	190	7%	102
VIRGINIA	Norfolk	234,100	759	3.24	2,158	9.22	166	8%	102
MASSACHUSETTS	Boston	644,064	2094	3.25	3,587	5.57	566	16%	113
NORTH CAROLINA	Charlotte-Mecklenburg	797,733	1696	2.13	9,325	11.69	1165	12%	118
CALIFORNIA	San Francisco	818,594	2250	2.75	4,557	5.57	1588	35%	130
ARIZONA	Phoenix	1,544,427	3146	2.04	15,626	10.12			135
COLORADO	Denver	607,051	1470	2.42	4,501	7.41	583	13%	141
Florida	Tampa	347,830	952	2.74	3,131	9.00	780	25%	155
WASHINGTON	Seattle	620,195	1344	2.17	6,449	10.40	513	8%	157
OREGON	Portland	564,392	957	1.70	4,120	7.30	375	9%	174
CALIFORNIA	Riverside	301,859	361	1.20	2,068	6.85			191
CALIFORNIA	San Diego	1,313,433	1863	1.42	6,387	4.86	1492	23%	221
CALIFORNIA	Anaheim	338,492	389	1.15	1,594	4.71	503	32%	280

⁹⁷Armao, "UASI Data Table of 26 Agencies."

Table 33. 2009 Sorted by Crime Ranking; Then Burglary Arrest Ratio; Then Burglary Rate⁹⁸

								Burglary	
			Number	Ofc.per		Number of	Number of	Arrest to	
			of	1000	Number of	Burglaries per	Burglary	Burglary	Crime
State	City	Population	Officers	Residents	Burglaries	1000 Residents	Arrests	Ratio	Ranking
MISSOURI	St. Louis	355,208	1408	3.96	6834	19.24	1011	15%	2
OHIO	Cleveland	429,238	1642	3.83	9226	21.49	1258	14%	8
MARYLAND	Baltimore	638,755	3013	4.72	7798	12.21	1262	16%	13
DISTRICT OF COLUMBIA	Washington	599,657	4052	6.76	3696	6.16	314	8%	16
FLORIDA	Orlando	235,109	725	3.08	3770	16.04	414	11%	17
GEORGIA	Atlanta	552,901	1506	2.72	9112	16.48	911	10%	18
Ohio	Cincinnati	333,568	1113	3.34	6287	18.85	922	15%	19
PENNSYLVANIA	Philadelphia	1,547,605	6722	4.34	10969	7.09	1527	14%	21
MINNESOTA	Minneapolis	382,618	888	2.32	4741	12.39	338	7%	30
FLORIDA	Miami	419,205	1124	2.68	4856	11.58	521	11%	45
PENNSYLVANIA	Pittsburgh	312,232	914	2.93	2811	9.00	376	13%	48
TEXAS	Houston	2,273,771	5371	2.36	29279	12.88	1509	5%	57
NEVADA	Las Vegas Metropolitan Police Department	1,377,282	2735	1.99	13512	9.81	1088	8%	67
NORTH CAROLINA	Charlotte-Mecklenburg	777,708	1635	2.10	9817	12.62	1161	12%	70
ARIZONA	Phoenix	1,597,397	3279	2.05	16281	10.19	1375	8%	92
CALIFORNIA	San Francisco	809,755	2367	2.92	5197	6.42	775	15%	93
MASSACHUSETTS	Boston	624,222	2177	3.49	2955	4.73	580	20%	104
VIRGINIA	Norfolk	235,097	755	3.21	2078	8.84	101	5%	105
MINNESOTA	St. Paul	280,194	614	2.19	2929	10.45	258	9%	112
Florida	Tampa	343,890	964	2.80	3501	10.18	776	22%	122
COLORADO	Denver	604,680	1510	2.50	4763	7.88	681	14%	167
OREGON	Portland	560,908	957	1.71	3696	6.59	300	8%	173
CALIFORNIA	Riverside	299,871	370	1.23	2020	6.74	505	25%	174
WASHINGTON	Seattle	602,531	1351	2.24	6709	11.13	390	6%	183
CALIFORNIA	San Diego	1,314,773	1894	1.44	6693	5.09	1513	23%	191
CALIFORNIA	Anaheim	335,970	405	1.21	1457	4.34	517	35%	268

Table 34. 2008 Sorted by Crime Ranking; Then Burglary Arrest Ratio; Then Burglary Rate⁹⁹

								Burglary	
			l	Ofc.per		Number of	Number of	Arrest to	
			Number of	1000	Number of	Burglaries per	Burglary	Burglary	Crime
State	City	Population	Officers	Residents	Burglaries	1000 Residents	Arrests	Ratio	Ranking
MISSOURI	St. Louis	356,204	1,405	3.94	7274	20.42	1090	15%	4
OHIO	Cleveland	433,452	1,613	3.72	9102	21.00	1289	14%	11
MARYLAND	Baltimore	634,549	2,998	4.72	7832	12.34	1300	17%	12
GEORGIA	Atlanta	533,016	1,619	3.04	9989	18.74	1137	11%	16
FLORIDA	Orlando	229,808	740	3.22	4279	18.62	433	10%	18
MINNESOTA	Minneapolis	376,753	891	2.36	5591	14.84	439	8%	20
DISTRICT OF COLUMBIA	Washington	591,833	4,030	6.81	3781	6.39	379	10%	21
PENNSYLVANIA	Philadelphia	1,441,117	6,764	4.69	12845	8.91	2034	16%	22
Ohio	Cincinnati	332,608	1,083	3.26	6330	19.03	893	14%	28
FLORIDA	Miami	427,740	1,073	2.51	4941	11.55	638	13%	35
TEXAS	Houston	2,238,895	5,048	2.25	26947	12.04	1231	5%	48
NEVADA	Las Vegas Metropolitan Police Department	1,353,175	2,530	1.87	14902	11.01	1337	9%	56
PENNSYLVANIA	Pittsburgh	309,757	850	2.74	3108	10.03	449	14%	61
NORTH CAROLINA	Charlotte-Mecklenburg	758,769	1,637	2.16	11933	15.73	1110	9%	62
ARIZONA	Phoenix	1,585,838	3,351	2.11	18783	11.84	1744	9%	65
VIRGINIA	Norfolk	235,067	757	3.22	1868	7.95	117	6%	87
MASSACHUSETTS	Boston	604,465	2,213	3.66	3493	5.78	698	20%	100
CALIFORNIA	San Francisco	798,144	2,391	3.00	5401	6.77	1110	21%	102
Florida	Tampa	336,911	979	2.91	4098	12.16	923	23%	105
MINNESOTA	St. Paul	276,083	598	2.17	2936	10.63	314	11%	113
COLORADO	Denver	592,881	1,541	2.60	5173	8.73	779	15%	129
OREGON	Portland	553,023	989	1.79	4307	7.79	391	9%	141
WASHINGTON	Seattle	598,077	1,318	2.20	6503	10.87	355	5%	165
CALIFORNIA	San Diego	1,271,655	1,987	1.56	7743	6.09	1522	20%	184
CALIFORNIA	Riverside	299,384	385	1.29	2208	7.38	416	19%	190
CALIFORNIA	Anaheim	333,746	424	1.27	1,604	4.81	515	32%	236

⁹⁸ Armao, "UASI Data Table of 26 Agencies."

⁹⁹ Ibid.

I. ANALOGOUS CASE STUDY

While there are dissimilarities between professional sports and crime in a community, some things are similar; although not necessarily tangibly described or quantified. Those that have played or coached organized sports understand the mystery of momentum as it relates to the opponent. This same momentum can be felt in the crime fight when there is a strong sense of mission and performance. Momentum, quantified into performance, results is the focus of this illustration.

In an attempt to quantify team or performance success within a playing season, certain team statistics were examined as a comparison model to how a law enforcement agency responds to burglary as a sub-statistic of performance success. The data sample came from the National Football League (NFL) between 2008 and 2010, which matches the calendar years that the crime statistics. The NFL statistics focus on the teams in for the Super Bowls since those teams prevailed in each of the conferences (National and American). 100

Each team was examined for its final ranking in both offensive and defensive performance in only one statistic each. Yards gained (offense performance) and yards against (defensive performance) seemed to be the best barometer of final standings by overall performance. The hypothesis is that a team making it to the Super Bowl had to have a relatively high ranking in offensive play, defensive standings, or both.

At the close of the 2008 season, the Pittsburgh Steelers squared up to the Arizona Cardinals for the Super Bowl. Pittsburgh finished number one in defense for least amount of yards against (3,796)¹⁰¹, and Arizona finished number four in offense gaining 5,852 yards among all 32 teams.¹⁰² Following the 2009 season, the New Orleans Saints, who were number one in offense yardage gained with 6,461, played the Indianapolis Colts

¹⁰⁰ Scott Gimpel, "NFL Stats," NFLdata.com, 2007, <a href="https://nfldata.com/nfl-stats/team-stats.aspx?sn=4&c=0&dv=0&ta=1&tc=0&st=OpponentOffensiveYards&d=0&ls=OpponentOffensiveYards&d

¹⁰¹ Ibid

¹⁰² Ibid

who finished in the top 10 of offense with 5,800 total yards gained. ¹⁰³ Lastly, the Green Bay Packers played the title game against the Pittsburgh Steelers in 2010, and Green Bay finished in the top 10 of both offense (5,730 yards gained) and (4,946 allowed gainst), while Pittsburgh ranked number two in defensive play only allowing a total of 4,430 yards against. ¹⁰⁴

The purpose of this short and analogous study was to illustrate the results-based data within a larger complex adaptive system such as the NFL football season. Crime, too, is especially complex in its adaptive and evolving environment. Although football has more rules and regulations within its realm of competitive play than an open society, things such as player injuries, weather, pre-game travel fatigue, etc., can mimic some of the complex and adaptive or evolving conditions of a law enforcement agency trying to win the crime battle. If an agency focuses on the core tenets of reducing crime, then it is also possible to allocate that proactive work effort gained to thwart precursor acts of terrorism. Whether the fundamentals are gaining yardage, defending yards against, or reducing burglary, it all parlays into performance results for the team or community.

A way to help achieve those results is to implement a distributed and real-time situational awareness solution to give all crime fighters a common operating picture and sense-making capable application.

¹⁰³ Gimpel, "NFL Stats."

¹⁰⁴ Ibid.

VI. V²I²SION CONCEPT RECOMMENDATION ONE

A. INTRODUCTION

Despite the national downward trend in both violent (five-year trend 2006–2010 showing a 13.2 percent reduction)¹⁰⁵ and property crime (five-year trend 2006–2010 of a 9.3 percent reduction)¹⁰⁶ police officers are artificially handicapped in their ability to quickly resolve and prevent crimes because of the lack of up-to-the-moment information. Currently, there are limited or no effective methods to facilitate real-time communication within a police department, between agencies, and to community members. Because of this, the delay between the actual commission of the crime, the police response, and processing and recording of information and intelligence results in slower resolutions.

B. ACRONYM DEFINED AS A PROCESS

To address this, an innovative strategy-to-process is conceptualized entitled V²I²SION, which translates to: Validation, Visualization (V²), Information, Intelligence (I²), Solution, Intelligence, Optimization, and Next. The purpose of V²I²SION is to enable readily accessible *real-time* communication between officers and agencies; *real-time* mapping of crime occurrences and *real-time* recording of intelligence in order to promote informed tactical decisions; increase the swiftness of resolution; and prevent and reduce crime. The strategy-to-process was inspired on the front line from those best practices that evolved over the past nine years (2002–2011) of crime reduction within the Tampa Police Department; crime reduction which reached over 64 percent. ¹⁰⁷ As the best practices grew, the gaps and inconsistencies became more and more apparent; this was the information-transfer loss-rate, which equated to a loss of speed. Criminals thrive when law enforcement does not share information quickly enough or at all.

^{105 &}quot;Uniform Crime Reports."

¹⁰⁶ Ibid.

^{107 &}quot;Annual Report."

The V^2I^2SION concept is designed to reduce and prevent crime by providing more efficient, economical, and effective policing. The V^2I^2SION model is based on the following core components described below.

1. Validation

Each reported event must be validated as a crime. The pursuit of intelligence related to unverified events is an inefficient use of police resources.

To elaborate on validation, once an officer responds and verifies that an offense has occurred, there is typically a delay before the crime put into an official report and becomes an icon on a map. Actually, the days of making a physical pin map in a police commander's office was more real-time, it just was not shared very well—mimicking a centralized information and intelligence model. Many supporting technologies offer this capability after the records management and analytical processing. However, if an officer has verified a crime has occurred, he or she can place it on the map immediately to begin geo-spatial awareness and effective case management.

This would be analogous to triaging a new patient in the emergency room and verifying they need to see a doctor except that the patient would be made visible to the entire emergency room staff all at once, and anyone with the capability could attend the patient immediately. It also speaks to the subjectivity and speed factors within a supporting technology discussed in the literature review. Additionally, it addresses the situational awareness and sense-making in one common operating space. By immediately posting a crime worthy of crowdsourcing a solution, it decreases the lag time of waiting for a report to be written, reviewed, and made into a map. Potential patterns can be discerned immediately and symptoms of the crime pattern can be seen and the sense-making process can occur. Data subjectivity through human decisions to share or not to share becomes less of an issue since all personnel are working on the same crime fighting platform. In essence, function follows form.

2. Visualization

Through the creation of **icons of each validated crime event**, end-users can visualize geographical crime patterns and hot-spots in real time.

Beyond the obvious, it is not simply the fact that crimes are electronically posted by the originating officer for instant visual awareness, but it is more importantly about geo-ownership. By posting validated crime and launching a case management flow, it creates a heuristic that can immediately engage other line and latent personnel who can work to solve an offense in a speedier fashion. Faster case awareness can lead to faster solutions and less crime by the same offender. Most agencies train their officers to be responsible for a particular geographical area, typically referred to as a beat or zone. By validating and visualizing a new crime on their own, it can exude a level of area and individual accountability that says, "I need to make this community I am responsible for *safe*."

The issue of people thinking in pictures and a real-time map visualizing offenses in various layers by crime type (e.g., robbery, burglary, auto theft) has been previously discussed. Also discussed is the fact that putting a spatial and temporal configuration begins the sense-making and seeing process.

Consider the following: A new burglary is reported, validated, and posted onto the map, and the historical burglary layer is turned on and shows that an arrest was made 18 months earlier of a defendant using a similar modus operandi and the offender layer shows he is out of jail and living nearby. All this can lend itself to information to get investigative traction on the case. Without this technology, an officer or detective would have to rely solely on his or her experiences, in that particular community, use subjective data mining, and/or fishing expedition to find a suspect. The best part of this technology is that when officers and detectives get promoted, reassigned or retire, the data stays in place. This creates the artificial experience process. Even better, it stays in place when the same officers and detectives go off shift or off work cycle (days off) and grows more when they return to work—all visually available in real-time. No more meetings, no more maps being made, and no more subjective interpretations of the visual and supporting

data—all at the fingertips of an end user's hand-held, in-car or desktop device and monitor. This is what a technological solution like V²I²SION offers.

3. Information

More efficient policing involves **speedier sharing of information**. A delay in the records management systems (RMS) "cools" the case.

As written earlier, the founding fathers of CompStat converted the old culture of policing by professional happenstance into a method of data review and accountability. The entire V^2I^2SION concept, as a process, allows CompStat to become the social media progression through information exchange iterations versus writing to read the perfect newspaper a day later.

As information comes in by geography, active investigations, tasking, etc., it is putting metaphorical balls in the air to latch on to in order to make sense of policing in a particular time and space. Using a blog format, which is savvy for the newer officer generation, those pieces of information that have traditionally gone home in an investigator's back pocket are now left on a technological platform for all personnel to see. As Mintzberg conveyed about seeing behind to see the way ahead, see laterally to see more vertically; and see below to see above—all requires implementing these "points of view," which allows the information to be seen through. 108

Whether a blog is about a particular issue in a neighborhood or a particular case, it again gets likened to multiple doctors seeing a single patient and knowing what the previous treatments or prescriptions were to make sure that it is working in benefit of the patient. Well, if the community or a particular victim is the "patient" of law enforcement, they would want our police and detective "doctors" sharing information in real-time for the best opportunities and de-confliction available.

Re-mentioning the information subjectivity matter, by blogging crime issue in real-time jurisdictional-wide, it helps to remove that risk that a commander or supervisor

¹⁰⁸ Mintzberg, "The Fall and Rise of Strategic Planning."

unintentionally withheld an important piece of data that could solve a case or save a life. The "I thought you knew" or "nobody took ownership because everyone thought someone else was going to do it" factors diminish with real-time information sharing.

4. Intelligence

Intelligence develops over time and across shifts. A smarter way to police is to communicate information driven **intelligence across deployments**, **supervision**, **and command structures**, also in a real time format.

As data and information churns in systems thinking environment, it gets honed into intelligence. That intelligence becomes premium information that is made available to the front line troops getting the job done. Many law enforcement cultures want to protect information-to-intelligence because it is special information. While that special information does occasionally need to be protected for the benefit of the case, hoarding it can also lead to the demise of the community and officer safety. Officers, deputies, and troopers in the field need not only to access real-time information and intelligence, they need to be able to post it immediately and leave it for the next shift or work cycle. By posting crime bulletins, intelligence bulletins, wanted bulletins, officer safety bulletins, and other jurisdictional bulletins in the same common operating space, which also contains crime maps and informational blogs that are all made visual into layers, allows the real-time, crime fighting synthesis to occur.

Re-quoting Dr. Dervin's sense-making definition of knowledge as being the sense made at a particular point in time-space by someone who converts the "knowledge" to intelligence, and the "someone" to law enforcement personnel in need of the real-time intelligence. ¹⁰⁹ It doesn't matter whether an agency is using an intelligence-led policing method, a place-based or offender-based policing method or even predictive analysis tools, it all has to roll up into intelligence at some point and have the opportunity to be shared for action.

¹⁰⁹ Dervin, Sense-making Theory and Practice," 36–46.

Linking the maps and associated data layers with the information (informal) blog space and the intelligence (formal) features and keeping them intertwined in one situational awareness platform allows the line, supervisory, and command personnel to all be on the same page of the crime battlefield full-time. It should be noted here that this concept is considered mostly an informal documentation technological sharing platform and does not supplant or replace for formal records keeping or intelligence documentation requirements. What it does do, however, is replace unopened emails, selected audience text-messaging, scribbled notes on a pocket pad, and the overall gap of information sharing that occurs between law enforcement personnel and agencies.

5. Solution

Reducing crime involves finding holistic **immediate**, **mid-range**, **and long-term solutions**. This can be done with immediate arrests and proactive, offender management.

Solving crime to prevent future crime and re-allocate law enforcement energy to more proactive efforts, which can affect terrorism, is the opportunity with the V²I²SION concept. Merriam Webster Dictionary's definition of solution is, "An action or process of solving a problem."¹¹⁰ The process of solving crime and terrorism seems to have a much better chance with more viable, micro-processes or *puzzle pieces* available. The V²I²SION concept and process recommendation not only brings more pieces to the table, it keeps track of where they are interplaying with each other. By example, if the forensics supervisor is in the same technological situational awareness space that the frontlines are working, he or she can see the immediate need to process the evidence in a priority, which could potentially bring information to the level of intelligence by making a fingerprint on a known offender and thus assisting in an apprehension of an offender.

While case closure by arrest is effective, it is not the entire, or even the best solution. It's really only a mitigation. However, while the mitigation via arrests and prosecution occurs in the crime fight, other solutions based on having all information and

¹¹⁰ Merriam Webster, s.v. "solution," http://www.merriam-webster.com/dictionary/solution (accessed November 18, 2012).

intelligence at hand can start to create preventative solutions by getting ahead of a potential property or violent offense. If an officer blogs about a threat she has overheard by doing good ground work in her zone, and the next shift officer reads the blog at the start of his shift and uses his sources to thwart the offense—than that is the ultimate solution.

6. Post-resolution Intelligence

Continued post-resolution intelligence within and across agencies increases police effectiveness for crime reduction and public safety maintenance in the city and the entire region.

Quite often, the arrest or interrogation debriefing intelligence stays with the investigator to shore up the case for prosecution. If the investigator posts this in the way of a post-arrest intelligence brief, then there is a better potential of making connections to other unsolved cases in the community and contiguous or regional community. If a detective arrests someone with a unique firearm, say one with white tape on the grip, and a previous robbery victim's interview revealed that a month earlier he was robbed and recalls a gun with a white handle, a connection potentially be made in the common operating picture or even researched by querying all technological feature.

Everyone arrested or interrogated should be interviewed as if he or she could be arrested again in the future. If the criminologists are true, then it only makes sense to share the de-briefed intelligence of the 20 percent that commit 80 percent of the crime.

7. Optimization

Aggregating the previous processes **provides the most optimal and cost effective solutions** for effective policing.

By working in one, situational awareness, common operating picture for all law enforcement personnel the big data can be shared in distributed style versus centralized or even in a decentralized format. By using a starfish, or distributed model, instead of a spider, or centralized model, all personnel essentially become their own analysts.¹¹¹ No more store front analytical or canned processes. All data is a metaphorical farm waiting for the information to be cultivated into actionable intelligence by the people getting the job done.

It allows a quasi-leaderless policing model to commence to combat a leaderless criminal enterprise.

8. Next

Policing requires being prepared for and aware of what is coming next.

This creates a V²I²SION loop. Getting the flywheel moving or creating game changing momentum is required to combat crime well. While having a zero crime rate is too idealistic, it can remain a vision. Offenders are going to cycle in and out of jail; they are going age-out or grow up, and meanwhile the attrition of most law enforcement agencies create a culture to work harder instead of smarter. There sadly will always be the *next* crime, the *next* offender, and *next* deployment, tactic or strategy to combat the unavoidable *next* attack out in the community.

By maintaining visualized, layered information and intelligence is real-time, as well as maintaining the historical in a manipulated solution, the *next* doesn't seem as fearful. The more the crime fighting team takes on and successfully conquers as a crowd instead the former silo-based processes, not only can crime be reduced to reveal that proactive time to disrupt other activities such as precursory acts of terrorism, but it can also make for a less stressful working environment for the officers.

In his book, *Righteous Mind*, Jonathan Haidt speaks of people binding together and forming groups to conquer real or metaphorical evil. 112 Whether binding together to cheer on their favorite team, build a home for the needy or to crush crime, if this theory is true then a binding platform is needed. The V²I²SION concept process gives this unique

¹¹¹ Ori Brafman and Rod A. Beckstrom, *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations* (London: Penguin Group, 2006).

¹¹² Jonathan Haidt, *The Righteous Mind* (Toronto, Canada: Pantheon Books, 2012).

common operating picture to bind information into intelligence and make it available in real-time.

C. CONCLUDING RECOMMENDATION ONE

The V²I²SION model could be implemented on the ground using innovative software program that creates "virtual notebooks" of information. Evidence from the Tampa Police initiatives suggests that finding solutions to crimes would be swifter if the time from the incident occurrence to recording, mapping, and making the intelligence available to the agency were quicker. Therefore, a technology to record information and intelligence and map criminal events in the police car or at the crime scene can be utilized. Officers will be able to enter information into data management blogs, review, and search blog entries by counterparts, create reports, and reference data using mapping technology. Under the V²I²SION concept, these "virtual notebooks" of information incorporate real-time mapping and visualization of crime incidents, on-the-spot incident reporting, and instantaneous blogging (recording) of gathered intelligence (that can be shared in real-time). The added functionality to already utilized technology also saves money.

Once the crime is validated, it is mapped and the relevant information posted to a case management blog attached to the plotted crime dot. This "hot" data (versus post-RMS cold data) is now in the line of sight for all TPD personnel to see and act upon. This strategy is beneficial in three explicit ways:

- 1. Officers have access to data related to the case quicker;
- 2. The reporting officer can communicate with a greater number of investigators and officers; and
- 3. Redundant tasking is minimized.

As an example, the investigation into a late night offense may transcend officer shifts. By using the V^2I^2SION concept to document the investigation as it is happening, the oncoming shift officers can avoid repeatedly visiting residential addresses because instantaneous information from the first responders is already available. That is, the

activities associated with the investigation are blogged, time-stamped, and made available on the V^2I^2SION concept system immediately. This has an additional benefit of enhancing community trust because officers are not perceived as harassing and unnecessarily disturbing the same locations because of the lack of inter-shift communications.

VII. RECOMMENDATION TWO CASE STUDY: SITUATIONAL AWARENESS FOR ENFORCERS' COMMON OPERATING PICTURE (SAFECOP)

A. INTRODUCTION

SAFECOP as a pilot technology is offered as a solution for the concept and process of V^2I^2SION . It actualizes the sharing process within a technological platform, which allows the real-time situational awareness within a common operating picture to offer the sense-making space for law enforcement. It becomes the technological opportunity of the *form* to create the *functionality* of crime fighting.

A beta-deployment of SAFECOP occurred during the 2012 Republican National Convention (2012 RNC) in Tampa, Florida. The premise of constructing a pilot-version of the solution was centered on the non-event deployment of the 2012 RNC. The city of Tampa has a strong sense of mission commencing with crime reduction and was losing two-thirds of its personnel, including many of the latent and analytical positions to the 2012 RNC. The SAFECOP solution was constructed as an opportunity to maintain the crime fight while the national special security event was in operation.

SAFECOP was installed via desktop and mobile computer for over 300 non-event officers, detectives, and managerial personnel throughout the city. The non-event operational period was eight days long. This was the period that the agency was in an emergency deployment to minimally cover calls for service while the vast majority of not only personnel, but talented personnel, were assigned to the 2012 RNC duties.

During the five day period of the actual 2012 RNC event, total crime was reduced 26 percent of FBI part one and part two crimes. The solution closed the gap of the normal processes that were temporarily unavailable while the 2012 RNC was taking place.

B. DESIGN

As mentioned, the solution was conceptualized around the V^2I^2SION process, combined with a focus around being social media intuitive. This was purposeful, as are

already here as Millennial or Generation Y or new law enforcement officers are coming in as Generation Z or Gamers, , while the Generation X and Baby Boomers are on the verge of retirement. 113

The V²I²SION concept was born in a silo, but based on the need for more expeditious information sharing and better process flow, while the SAFECOP design emerged off of four cornerstones offered to a group of best practice, practitioners. This design-to-pilot was valuable because the actual solution was a technological wrapper based on the progressive evolution of systematically lowering crime in a fairly large city (Tampa) over a nine year period. It is hard to debate against building a system that fortifies the proven best practices and offers them in a real-time common operating picture. Even if the final solution did not deliver the full value of the V²I²SION process, at minimum it would provide more effective communication between the field, then managers and the analysts.

Instead of trying to build a system from scratch, and force more licensing and infrastructure costs, the SAFECOP requirements were offered to two existing and inproduction technological solution companies. Products from these companies, NC4 and Digital Sandbox, were already purchased and being used and sustained in the Tampa Bay Urban Area Security Initiative (TB-UASI). The concept of using in-production technologies made sense and saved money. These technologies had the core attributes, in addition to development and licensing cost-savings and offered the ability to work in a daily technological solution that could be toggled into its primary purchased role to maintain an end-user familiarity. This has value versus leaving it on the metaphorical shelf pending its situational use in special events or emergency management.

NC4's solution, called E-Sponder, was developed for emergency management situational awareness and resource management. 114 Both the company (NC4) and their

¹¹³ Matt Rosenberg, "Names of Generations," *Geography*, About.com Guide, http://geography.about.com/od/populationgeography/qt/generations.htm (accessed October 10, 2012).

¹¹⁴ "Public Safety and Incident Management," NC4, http://www.nc4.us/ESPONDER.php (accessed October 10, 2012).

product (E-Sponder) were designed with end user flexibility rather than typical technological rigidity. E-Sponder was purchased after a bout of hurricanes in the Tampa Bay area after 2004, and the primary solution based in Microsoft's SharePoint was morphed to be Incident Command System/National Incident Management System friendly by implementing an event planning module. The concept of using the event module was a fortuitous consequence, and while the original intention was to bring daily operations like planned special events into the post-9/11 local law enforcement workspace to be seamless between events and emergencies; this process also became the seedling for the future solution of SAFECOP.

Prior to SAFECOP, the V²I²SION process was simultaneously introduced to two existing solutions, one being NC4's E-Sponder., The other, which was Digital Sandbox's Site Profiler, was hoped to be the analytical engine that powered the Sense-making algorithms to connect potential offenders to crimes within the concept. Digital Sandbox was also developed, purchased, and sustained for the TB-UASI shortly after 9/11, and it, too, evolved into much more than a risk tool for critical infrastructure and key resources.¹¹⁵ Site Profiler appeared to be the perfect marriage partner to E-Sponder with boost the human investigators' algorithms toward eventual computations and display the sense-making results to the variable metadata generated by the end users.

Both solutions working side-by-side for many years, servicing the planned and unplanned events and incidents in the Tampa Bay region. This was coupled with a three-year lead in the V²I²SION conceptual discussion. Despite all this, the mutual business requirements could never be established to create the full pilot. The 2012 RNC proved to be the most viable scenario for both funding and beta-deployment, and because the co-development round-tables could not create the mutual scope-of-work agreeable to all parties, the project was limited to NC4 to develop the SAFECOP solution. This did nothing to preclude future integration between the two, or allowing a technology

^{115&}quot;Site Profiler," *Digital Sandbox*, http://www.dsbox.com/SiteProfiler/ (accessed October 10, 2012).

developer to fully construct a solution on its own platform as a module or completely from the metaphorical ground up.

The program designed for the 2012 RNC had to be done in agile format because it had to be fully deployed for the event period. After the development of the requirements and creating the project scope-of-work, there was approximately five months to finalize and deploy. Working through one technological vendor proved to be the most efficient process for the 2012 RNC and essentially the beta for the post-RNC complete roll out.

The city of Tampa's Technology and Innovation Department (T&I), which already having its hands full with other 2012 RNC supporting technology and cyber security implementations, had to provide a secure Computer-Aided Dispatch (CAD) feed to the SAFECOP solution. This feed allowed the V²I²SION process to commence by allowing the officer/investigator to validate a crime, which launches the information and intelligence functions, as well as the case management. This now remains to be the computer-generated algorithmic-gap in the program, which currently requires human effort for the sense-making process to occur. The full V²I²SION concept is designed to make offender-crime correlations to improve investigative speed and provide artificial experience. This occurs by mapping and weighting the metadata between entries like crime type, location, modus operandi against offender descriptions and footprints, current jail or prison status and also modus operandi.

The concept that when an officer is dispatched to a residential burglary for the CAD feed pre-populates certain information fields such as original dispatch call type, location, time, and date. Once an officer validates the crime is truly a legitimate burglary, she immediately uploads it to the map, one of the four technological cornerstones. The original call notes are either carried into the program by the CAD process or entered directly by the officer, which is preferred as another step of the validation process. The CAD process has to be compliant with the Federal Bureau of Investigation's Criminal Justice Information Services FBI-CJIS and other personal information requirements. The agency and the developer can determine which method is used. Technically, there does

not have to be a CAD feed, and all the data elements for a validated offense can be batched entered to commence the V^2I^2SION process.

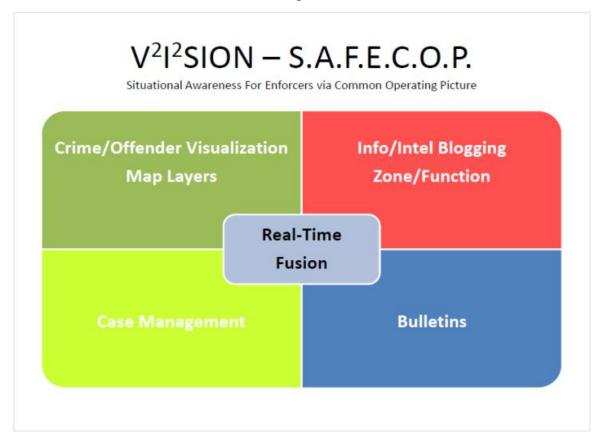


Figure 1. Four Cornerstones of SAFECOP



Figure 2. Homepage of SAFECOP

If the solution is fortified with algorithmic computations, this is where the metadata match-ups would occur and present an informational return on known offenders. If the burglary occurred in a certain geographic, then the self-launching query would start identifying all offenders inside the solution that had previously worked that particular (community) footprint. The crime-offender mapping would continue to get refined based on witness input (e.g., if a witness said the offender appeared to be a juvenile and school was in session, those descriptors were entered). Beyond the description, if the previous arrest of a burglar included the modus operandi, which matched, then there would be better weighting of the potential match. Of course, and regardless of how well a correlation appeared, a sanity check and further investigation would be required to develop a circumstantial case. Absent the algorithmic feature, which is the current SAFECOP pilot, correlations have to be made via investigator algorithms based on experience and known offender analysis applied by hand.

Whether the human-based or computation-based algorithms are a part of the program, the validated crime's next step in the V^2I^2SION process is to place it in real-time on the map. This allows the offenses to be visualized in spatial and temporal perspective immediately. There is no need to wait for delayed records management data to be configured and away from other important sense-making elements.

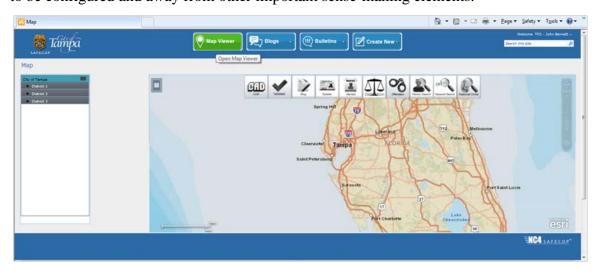


Figure 3. Map Cornerstone One (1)



Figure 4. Map Cornerstone One (2)

Once the crime is validated and visualized, the next programmatic, or second cornerstone, is the opportunity to case management blog toward a solution. As mentioned in the V²I²SION process, this allows space for information and intelligence to grow toward a solution. Using the burglary example, best practice efforts are efforts that progress toward a solution. These efforts include efforts such as conducting a neighborhood survey and posting the results, itemizing the forensic steps such as DNA or fingerprint collection and processing, and checking pawn shops or pawn technology for any stolen property. These steps can be viewed by detectives and supervisors to offer the best opportunity against investigative time delays and preventing additional victims. In addition, the technology can be alarmed inside the solution to send an email to text message to the internally interested personnel when new information is added. As each person with responsibilities makes a blog entry, it is analogous of different doctors caring for the same patient, adding curing measures. They do this all while de-conflicting the efforts to avoid process contamination for the ultimate place of the courtroom.

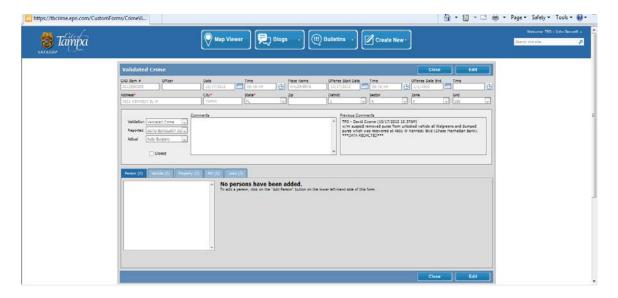


Figure 5. Case Management Cornerstone Two

Simultaneous to the visualization layers of crime icons and correlating offenders, as well as case management, is the development of various types of bulletins (third cornerstone) for real-time situational awareness. These bulletins can be made in the field immediately by on-scene investigators, as well as read and queried by any data element. Reverting back to the burglary investigation, if a surveillance video availed itself for a suspect vehicle and offender, the video can be paused and photographed with a cell phone, emailed to the officer who the uploads it into a crime bulletin in a matter of minutes. Once the crime bulletin is constructed, it can be converted into another icon with map coordinates to show the correlation on the main map layer. Bulletins can be constructed for unsolved crime, intelligence, officer safety, wanted offenders, and outside agency purposes.

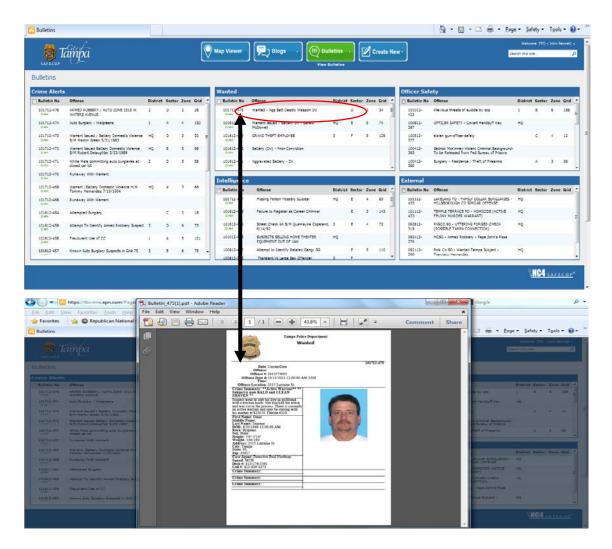


Figure 6. Bulletins Third Cornerstone

The final cornerstone is open geo-blogging about areas of responsibility. Essentially, for any valid policing purpose, blogs can launch a thread of information and lead toward intelligence in real-time at the street level. There is no loss in interpretation by the bloggers as they eliminate any of the former, middle analytical filters. It also leaves the information and intelligence available for the next shift, work cycle, or generation that works that area. This defines the artificial experience discussed earlier. If an officer or detective gets re-assigned to a new area, the information, and intelligence equity remains in that geographical space. It does not go home on a pocket pad, it does not get lost in a subjectively distributed email string or phone message; nor does it get

left out in a supervisory briefing. This exemplifies the section in the literature review that explains the technology helps to be objective around the subjective element—the human himself.

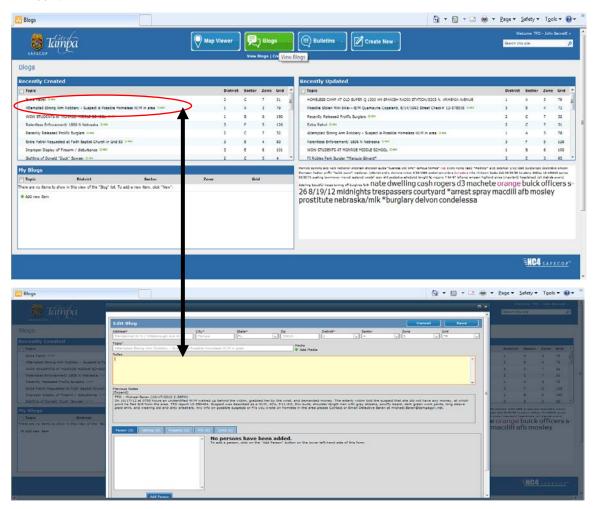


Figure 7. Blogs Fourth Cornerstone

As these four cornerstones—validation and visualization, case management, bulletin management, and blogging— are all synthesized into one common operating picture and generating human or computation-based correlations. They work toward reducing crime. By reducing crime, it allows a local agency to convert reactive and investigation time into proactive policing, which creates opportunities for disrupting terrorism by potentially identifying precursory offenses. Instead of bits and pieces of

information being consumed and processed, street level human intelligence is being managed in real-time. Moreover, it creates in-field fusion where the job is getting accomplished.

C. UTILIZATION CASE STUDY

As discussed earlier, the pilot version of SAFECOP was deployed in conjunction with the 2012 RNC as technology to reinforce the remaining limited personnel and functionalities that were left to manage non-event policing for a period of eight consecutive (including five main event NSSE days). Over 300 personnel were registered into the system, including all patrol, skeleton plain clothes and detective squad, and the remaining street level managers. The beta solution was void of data as it rolled out with empty crime, blogs, bulletins, and offenders. The only data was the information placed into the program over the eight days of police effort.

Each officer and beyond had in-car access to the SAFECOP solution, and by the end of the eight days, the information and intelligence sharing was rampant. The threads were not only professional, but they were all pertinent and required very little guidance. The solution was very law enforcement intuitive and required only registration and nomenclature training. Total crime was measured against the same five days of 2011, and crime was reduced over 26 percent within the FBI's part one and part two offenses.

Shortly after the 2012 RNC concluded, on September 5, 2012, an officer responded to a commercial burglary. While investigating the commercial burglary, the officer was able to view a surveillance video that showed a picture of the suspect. The officer photographed the paused video and created a bulletin in the SAFECOP solution. Several hours later an officer saw the suspect wearing the same clothes the suspect in the video. The suspect was detained, and after a consensual search, items taken in the recent burglary, including building keys, were located in his possession. It is this type of real-time situational awareness that brought a speedy solution to the case and potentially prevented additional burglaries from occurring. Less burglary equals less crime. Less

crime, more time for proactive policing and potentially disrupting those precursor crimes associated with planning and executing terrorism.

D. RECOMMENDATION TWO CONCLUSION

The three years to develop SAFECOP, essentially executing the V^2I^2SION process, while exciting in the 2012 RNC pilot roll-out, offered plenty of opportunity for adjustments prior to solidifying the 1.0 version. In less than a month of the pilot, over 40 line items of end-user fixes were submitted to the vendor. These requests validated that SAFECOP was a solution designed for the progress the agency made in the crime reduction processes and not some off-the-shelf technology that would theoretically work. Good policing drove the design, not the other way around.

The key to the initial roll-out was seeing the self-organizing communication without any need for direction. The line personnel simply started using the tool and within 60 days, crime bulletins increased 100 percent from the year earlier. What was more important than the sheer number of crime bulletins was the readership. Bulletins formally generated in email would get lost in the queue, especially over days off, and not get opened. Now due to the ability to sort by geography, it eliminates the theory of too-much information and each officer, detective, supervisor, manager, and analyst can isolate as much or as little information as necessary to make the necessary tactical correlations.

Additional development will be in the form of mobile applications, where potentially each cornerstone— map, case management, bulletins and blogging—can have its own application interface back to the entire solution. This would allow foot patrol officers, and possibly even military ground forces, to have situational awareness on a smaller, mobile device and also make inputs of the same data as one could on a desktop or mobile computer.

VIII. FURTHER RESEARCH OPPORTUNITIES

A. RECOGNITION HEURISTICS

Examination of speed in the battlefield as it relates to situational awareness can also prompt additional work into the area of recognition heuristics (RH). While there have been studies done by Daniel Goldstein and Gerd Gigerenzer; Daniel Oppenheimer; B.R. Newell, D. Fernandez, and T. Richter; and P. Späth¹¹⁶ relating to RH, there may be a correlation to RH as it pertains to situational awareness, especially Dervin's Sensemaking. It might be possible, even at the user-interface design level, to layout the information to allow better absorption by the end user in initiating a crowdsourcing field-approach to solving crime and preventing terrorism. This could be done by presenting the actionable data in a RH model for dealing in a complex-adaptive or complex-evolving system or society.

B. ADVANCED ANALYTICS

While computation-based algorithms are not new, additional research to their application into the role of crime fighting to create an artificial experience may have value. Most agencies have area of responsibility attrition, as well as change functional assignments many times within the span of a career. They shift bid to different geographic location, , or get promoted and re-assigned from general patrol operations to focused investigations such as property crimes, sex crimes, and homicide. By utilizing a common operating picture for a synthesis of collecting and distributing situational awareness information and intelligence, by the very people doing the collecting and sharing, computer-based correlations can be made of the metadata. This process, however, has to have a rules-of-evidence sanity check, but the use of advanced analytics to assist making data match-ups between historical offender profiles and new crimes can create a launching point to accelerate an investigation.

¹¹⁶ Gerd Gigerenzer and Daniel G. Goldstein, "The Recognition Heuristic: A Decade of Research," *Judgment and Decision Making* 6, no. 1 (2011): 100–121.

¹¹⁷ Dervin, Sense-making Theory and Practice," 36–46.

It is one thing to map, blog, create bulletins, and conduct case management inside on technological picture. It is another to create a program that develops a weighted, short-listing of potential criminal offenders by geography, modus operandi, and criminal availability of whether they were in/out of jail/prison at the time of the new crime. This can accelerate the investigator's tasking and checklists but, more importantly, standardize the initial approach regardless of the officers' or investigators' law enforcement and known offender experience.

C. BIG DATA, NETWORK FUSION AND 28 CFR PART 23

Assistant Chief Joseph W. Pfeifer of the New York City Fire Department wrote a timely article on "Network Fusion in Homeland Security Affairs." 118 definitely parallels between his discussion of network fusion and the objectives of Dervin's SAFECOP pilot common operating picture and situational awareness solution. Even so, additional effort can be done to elevate the granularity of SAFECOP and yet drill down on network fusion. Simply stated, the SAFECOP model allows user-based formation and intelligence sharing by the ground troops for the ground troops. Network fusion offers a similar approach, but it is still at the fusion level of the overall challenge. The opportunity for more research may be in the realm that can a SAFECOP model be constructed for the strategic altitude of the fusion environment; and coupled with network fusion becoming more tactical and frontline driven so the field operators can have a more distributed model than a centralized, or even a decentralized platform for better asynchronous crime fighting and homeland security information sharing? Lastly, yet most vividly—whether the V²I²SION process, SAFECOP pilot or their equivalents—our most important role involves the protection of our constitutional rights as individuals. 119 Therefore, before a SAFECOP model can be deployed in a multijurisdictional setting, compliance with 28 CFR Part 23 must be observed. 120

¹¹⁸ Joseph W. Pfeifer, "Network Fusion: Information and Intelligence Sharing for a Networked World," *Homeland Security Affairs* 8, Article 17 (October 2012).

^{119 &}quot;Criminal Intelligence Sharing Systems 28 CFR part 23Guideline," Regional Information Sharing Systems, http://www.riss.net/Policy/CFRGuideline (accessed November 7, 2012).

¹²⁰ Ibid.

IX. CONCLUSION

Information and intelligence sharing post-September 11, 2001 centered heavily in the disparate development of fusion centers nationwide as well as Joint Terrorism Task Force memberships. The disparate approach is not meant to be critical, but is meant to be the reality as the design and deliverables have shown to vary. The fusion centers were in response to the 9/11 Commission Report that directed state and local law enforcement to have a more active role in protecting the homeland. It makes sense to have the vast majority of law enforcement resources working at ground levels to take holistic ownership of their community in a manner they can ultimately influence. Investigations of the fusion centers were claimed to offer shoddy investigative reports, breached privacy protections, and mismanaged grant funding. 121

In an article dated as recent as October 18, 2012, the United States Department of Homeland Security (DHS) is touted for developing a DHS Common Operating Picture (DHS COP) project to create a unified situational awareness data platform. The solution is described as a public- and private cloud-based infrastructure that meshes data from partners. The article continues to refer to this DHS COP solution as mandated by law under the *Homeland Security Act*, and it offers a way to get information to the decision makers relating to terrorism and disasters. A COP and situational awareness is great, however, Sense-making is the next step, especially when combing through big and potentially disparate data.

In-between the 9/11 Commission Report and the DHS COP, while the United States was trying to get our arms around terrorism risk at the federal, state, and local levels, the New York Police Department was moving toward closing a decade of

¹²¹ Maggie Clark, *States Defend Counterterrorism "Fusion Centers" After Harsh Senate Report* (Washington, D.C.: Pew Research Center, 2012).

¹²² Richard W. Walker, "How DHS got its COPS on the Same Beat," GCN, October 18, 2012, http://gcn.com/Articles/2012/10/22/GA-DHS-Common-Operating-Pictures.aspx?s=gcndaily_191012&Page=1 (accessed October 20, 2012).

information and intelligence accountability in their CompStat process. ¹²³ This process was proliferated around the nation over the years and the culture of simply professional policing was moved into a business model. This practice was examined for increased rhythm and better situational awareness that will propel local crime fighting into the future. The demonstrated sense-making reality is that the most impact that the local law enforcement can have on terrorism is by staying in their effective working lane. A nexus has already been established by proximity data in the domestic terrorism arena that shows the precursor acts are relatively close to the intended targets. Whether or not precursor crimes are directly linked to the funding of international or domestic terrorism matters little if the offenders are being disrupted or apprehended and identified.

An agency has a better opportunity to thwart these crimes if it has a good handle on daily, local crime. Reducing community crime, this allows time for proactive work to accomplish maintaining and advancing crime the realized crime reduction, and it allows time for proactive effort. This creates crime reduction momentum and allows the law enforcement agency to control the criminal element, not the other way around, which would be where the criminal element controls the community which includes the local law enforcement resources.

By studying the crime of burglary, both qualitatively inside a single agency and quantitatively among 26 UASI agencies, specific analysis can be evaluated for process consistency and information sharing that can act barometrically for the rest of crime and homeland security. First, an agency that has realized beyond a 64 percent crime reduction and over a 56 percent reduction in burglary inside nine years must have not only processes and a sense of urgency in place but can also recognize those gaps when the processes and urgency are neglected. This approach, coupled with quantitatively analyzing 26 UASI agencies (also centered on the crime of burglary as an over-all measure of criminal health for a terrorism-risk-based community) provides a sense of showing importance on a property crime as an indicator of Sun Tzu speed and Dervin's sense-making of information and intelligence.

^{123 &}quot;Police Leaders at PERF/BJA Meeting Discuss CompStat."

Solve burglaries quickly, solve crime well. Solve crime well; prevent terrorism well. The opposite of doing these well can potentially be created or sustained with a strong, supporting technology.

It has been relatively discussed that technology can offer an objective side to the subjective human. This can also be elevated to the technology and an agency or well beyond a single person. The aforementioned DHS COP is an example of trying to take disparate and subjectively shared information and provide an objective solution that allows an opportunity for another entity to benefit from the collective whole. While some people will occasionally refer to the old cliché of "too much information," it is only too much if it does not make sense. All sorts of sense-making filters and algorithms can be placed on the data to help make sense and decisions.

The other part of any common operating picture based on situational awareness is the ability to distribute it. If the COP/SA is only at the strategic level of an organization, the entire objective-from-subjective part is lost. Whether data makes sense based on human algorithms or computations, it should be made as close to the problem as possible. The best place to have sense-making data is at the doorstep of the residential burglary, not a week later with cold, managerial filtered thoughts and actionable shavings. Keep the fresh, lively data, information, and intelligence in the field made by the field with the true sense-makers—the crime fighters. This approach was fortified by Major Stone's Revolution in Military Affairs (RMA), discussing information dominance based on faster processing in the battlefield.

One way an agency can help to sustain or gain on their crime reduction is to create a real-time, distributed information and intelligence sharing technology. The V²I²SION process and the SAFECOP pilot technology allowed the previous subjectivity of sharing to be in an objective environment where function follows form, and artificial experience can blossom. If an agency uses CompStat, Intel-led Policing, Predictive Analysis, or any other methods, the V²I²SION process contained in an SAFECOP model, it can only aid by allowing the line personnel to essentially see and share in real-time without unnecessary interpretations and offer a way to make sense out of big data.

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APPENDIX A. RECORDS FEES AND SERVICES

Home > Police > Programs and Services

- Police Home
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 Neighborho
 - . Police Athletic League
 - E Police Explorers
 - Project Lifesaver
 - Records Section Services
 - Sexual Offenders and Predators
 - . TPD Shoulder Patch
 - Trespass Affidavit Program
 - + Truancy Center

Quick Links

- Customer Service Center
- * TPD Media Relations Office
- . Help TPD Fight Crime
- . How to Join the TPD
- . Send an Email to TPD

Records Section Fees and Services



The following services are provided by the Tampa Police
Department's Records Section. The associated fees listed are
approximate and do occasionally vary. For further information
concerning service fees please contact the Records Section at (813)
276-3250.

Name Checks: \$3.00 per name plus an additional \$3.00 fee for

each alias name

Grid/Address Searches: \$3.00 per address or grid per year. Searches producing more than 20 pages will be charged an additional 15 cents per page. Historical data (those years prior to 1993) are run by another city department and their fee is \$35.00 per year.

Visa: \$3.00 per name plus an additional \$2.00 per name for certification

Online Reports: Currently only Traffic Crash reports older than 60 days may be ordered online.

Mail Requests: \$2.00 per report plus a self-addressed, stamped envelope. Check or money orders should be made payable to the City of Tampa. Mail to: Tampa Police Department

Attention: Records Section 411 N Franklin Street Tampa, Florida 33602

Photos: \$1.00 for copies of mug shots. Crime scene photos are reproduced by the department's Forensic Investigation Unit. Their photo lab can be reached at (\$13) 276-3382.

Inspection Fee: \$4.00 fee for having an officer inspect a vehicle for citation repairs. (this fee is established by the Florida Department of Motor Vehicles)

Certification: Any reports or name checks are certified for \$1.00

Report Copies: Copies reproduced at the Records Section service counter at One Police Center, 411 N

Franklin St, Tampa Florida, 8:00am - 5:00pm, Monday - Friday. Charges for reports are 15 cents for single sided pages.

Extensive Clerk Fees: Any requests involving an extraordinary amount of clerk time will be charged an additional \$15.00 per hour for processing plus the cost of copies.

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APPENDIX B. GENERAL OFFENSE HARDCOPY



TAMPA PD

GENERAL OFFENSE HARDCOPY

GO# 2009-354041 ARREST-DETECTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Jun-16-2009 (Tue.) 422 Occurred on: Jun-16-2009 (Tue.) 422

Approved on: Jun-16-2009 (Tue.) by: 36737 - LEISTL, CHARLES A

Report submitted by: 48871 - LAWRANCE, ROSCOE

Org unit: Squad 205

Address: 2142 BUSCH BL W

Municipality: TAMPA

District: 2 Beat: C9 Grid: 16

 ${\bf Felony/Misdemeanor: FELONY}$

Bias: None (no bias)

Value loss: \$17,585.00 Value recovered: \$2,150.00

Special study: Serial Numbers Provided

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-1 BURGLARY STRUCTURE/DWELLING - COMPLETED

Location: Specialty Store

Offender suspected of using: Not Applicable

Offense: #2 230D-7 PT/GT FROM BUILDING - COMPLETED

Location: Specialty Store

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-06-2012 (Tue.)



GENERAL OFFENSE HARDCOPY

GO# 2009-354041 ARREST-DETECTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

Related Text Page(s)

Document: CASE SUMMARY Author: 48871 - LAWRANCE, ROSCOE Related date/time: Jun-16-2009 (Tue.) 515

An unknown subjects broke into the complainant's paintball specialty store by smashing the glass out of the front door and stole \$17,584.86 in property.

For: 36599 Printed On: Nov-06-2012 (Tue.)

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GENERAL OFFENSE HARDCOPY

GO# 2009-378142 ARREST-DETECTIVE

1200-2 ROBBERY

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Jun-27-2009 (Sat.) 452

Occurred between: Jun-27-2009 (Sat.) 449 and Jun-27-2009 (Sat.) 452 Approved on: Jun-27-2009 (Sat.) by: 41737 - MCCRAY, HAROLD L

Report submitted by: 48673 - EVANS, AMY

Org unit: Squad 206

Address: 1451 FOWLER AV E
Municipality: TAMPA
District: 2 Beat: C6 Grid: 4
Felony/Misdemeanor: FELONY

Bias: None (no bias) Value loss: \$228.00

Special study: Fingerprints Attached

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 1200-2 ROBBERY - COMPLETED

Location: Gas Station

Offender suspected of using: Not Applicable

Weapon type: Handgun

Offense: #2 1000-1 KIDNAPPNG - COMPLETED

Location: Gas Station

Offender suspected of using: Not Applicable

Weapon type: Handgun

For: 36599 Printed On: Nov-06-2012 (Tue.)



GENERAL OFFENSE HARDCOPY

GO# 2009-378142 ARREST-DETECTIVE

1200-2 ROBBERY

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Related Text Page(s)

Document: CASE SUMMARY Author: 48673 - EVANS, AMY Related date/time: Jun-27-2009 (Sat.)

The two unknown suspects entered the listed business through the front door, at approximately 0650 hrs. Once inside, both subjects armed themselves with silver handguns. The unknown suspect in the black t-shirt attempted unsuccessfully to open the cash register, while the other suspect took the victim at gun point, and forced him to give them his wallet. They then forced the victim behind the counter, and ordered him to open the cash register. After obtaining the cash from the register, and several packs of Newport cigarettes, the suspects exited the business from the front door, then fled west bound. The victim then immediately called 911, and pressed the panic alarm.

For: 36599 Printed On: Nov-06-2012 (Tue.)

9

TAMPA PD

GENERAL OFFENSE HARDCOPY

GO# 2012-136408 ARREST-DETECTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Mar-08-2012 (Thu.) 1101

Occurred between: Mar-08-2012 (Thu.) 915 and Mar-08-2012 (Thu.) 1101 Approved on: Mar-11-2012 (Sun.) by: 36918 - WESTER, JAMES S

Report submitted by: 27058 - ARTHUR, JAMES E

Org unit: Squad 201

Address: 2901 KELLY RIDGE LN
Municipality: TAMPA
District: 2 Beat: C7 Grid: 31
Felony/Misdemeanor: FELONY

Bias: None (no bias)

Value loss: \$700.00 Value recovered: \$600.00

Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-1 BURGLARY STRUCTURE/DWELLING - COMPLETED

Location: Apartment/Condo

Offender suspected of using: Not Applicable

Offense: #2 230H-1 PT/GT ALL OTHER - COMPLETED

Location: Apartment/Condo

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-06-2012 (Tue.)



GENERAL OFFENSE HARDCOPY

GO# 2012-136408 ARREST-DETECTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

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Related Text Page(s)

Document: CASE SUMMARY Author: 27058 - ARTHUR, JAMES E Related date/time: Mar-08-2012 (Thu.)

The Def forcibly entered the listed residence by breaking a bedroom window. Once inside, he took cash from two envelopes in the victim's bedroom before fleeing.

For: 36599 Printed On: Nov-06-2012 (Tue.)

9

TAMPA PD

GENERAL OFFENSE HARDCOPY

GO# 2011-700861 ARREST -PATROL

2200-1 BURGLARY STRUCTURE/DWELLING

General Offense Information

Operational status: ARREST -PATROL Reported on: Dec-21-2011 (Wed.) 515

Occurred between: Dec-20-2011 (Tue.) 2200 and Dec-21-2011 (Wed.) 500 Approved on: Dec-22-2011 (Thu.) by: 45787 - FITZGERALD, JOHN

Report submitted by: 49250 - LYNCH, JOANA

Org unit: Squad 207

Accompanied by: 49755 - SAVITT, SCOTT Downtime: 1152

Address: 1733 MULBERRY DR E Apartment: B

Municipality: TAMPA
District: 2 Beat: D3 Grid: 39

Felony/Misdemeanor: FELONY

Bias: None (no bias) Value loss: \$181.00

Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-1 BURGLARY STRUCTURE/DWELLING - COMPLETED

Location: Residence/Other

Offender suspected of using: Not Applicable

Offense: #2 230H-1 PT/GT ALL OTHER - COMPLETED

Location: Residence/Other

Offender suspected of using: Not Applicable

Offense: #3 350A-7A MISDEMEANOR POSSESSION - COMPLETED

Location: Residence/Other

Offender suspected of using: Not Applicable Criminal activity: Possessing/Concealing

For: 36599 Printed On: Nov-06-2012 (Tue.)



GENERAL OFFENSE HARDCOPY

GO# 2011-700861 ARREST -PATROL

2200-1 BURGLARY STRUCTURE/DWELLING

Related Text Page(s)

Document: CASE SUMMARY Author: 49250 - LYNCH, JOANA Related date/time: Dec-21-2011 (Wed.)

This report is in reference to a Burglary to an Occupied Dwelling. While the victim slept the defendant forced entry into the apartment, moved items around, turned lights on and left the residence taking \$39.00, a pack of cigarettes and the victims debit card. The defendant attempted to use the card a several convenience store locations, where he was caught on camera. Victim identified the male in the video as the defendant. He was located out of Hillsborough County and arrested. Post-Miranda the defendant admitted to the offense.

For: 36599 Printed On: Nov-06-2012 (Tue.)

9

TAMPA PD

GENERAL OFFENSE HARDCOPY

GO# 2011-629469 ARREST -PATROL

2200-1 BURGLARY STRUCTURE/DWELLING

General Offense Information

Operational status: ARREST -PATROL Reported on: Nov-11-2011 (Fri.) 751

Occurred between: Nov-10-2011 (Thu.) 1600 and Nov-11-2011 (Fri.) 715 Approved on: Nov-11-2011 (Fri.) by: 44849 - HUTNER,MICHAEL

Report submitted by: 47728 - LINDEMANN, JASON

Org unit: Squad 207

Address: 7901 NEBRASKA AV N Apartment: 100 A

Municipality: TAMPA
District: 2 Beat: D3 Grid: 38

Felony/Misdemeanor: FELONY Bias: None (no bias) Value loss: \$150.00

Special study: Fingerprints Attached

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-1 BURGLARY STRUCTURE/DWELLING - COMPLETED

Location: Commercial Off Bldg

Offender suspected of using: Not Applicable

Offense: #2 230D-7 PT/GT FROM BUILDING - COMPLETED

Location: Commercial Off Bldg

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-06-2012 (Tue.)



GENERAL OFFENSE HARDCOPY

GO# 2011-629469 ARREST -PATROL

2200-1 BURGLARY STRUCTURE/DWELLING

Related Text Page(s)

Document: CASE SUMMARY Author: 47728 - LINDEMANN, JASON Related date/time: Nov-11-2011 (Fri.) 854

An unknown suspect(s) smashed the side window of the office building. While inside the suspect(s) stole a two small refrigerator and used a dolly. The suspect(s) did not take any of the desktops or printers. The suspect(s) left undetected in an unknown direction.

For: 36599 Printed On: Nov-06-2012 (Tue.)

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GENERAL OFFENSE HARDCOPY

GO# 2011-618292 ARREST-DETECTIVE

090A-1 MURDER 1ST DEGREE

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Nov-05-2011 (Sat.) 346 Occurred on: Nov-05-2011 (Sat.) 346

Approved on: Nov-05-2011 (Sat.) by: 42516 - BRIDGES-PREYER, SUSAN

Report submitted by: 49752 - RICE, NYLES

Org unit: Squad 311

Address: 1611 NEBRASKA AV N
Place: SALEMS GYRO
Municipality: TAMPA
District: 3 Beat: F3 Grid: 127
Felony/Misdemeanor: FELONY

Situation code: Single Vict./Single Offen.

Bias: None (no bias) Value loss: \$1.00

Special study: Video Available

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 090A-1 MURDER 1ST DEGREE - COMPLETED

Location: Restaurant

Offender suspected of using: Not Applicable

Weapon type: Handgun

Offense: #2 1200-2 ROBBERY - COMPLETED

Location: Restaurant

Offender suspected of using: Not Applicable

Weapon type: Handgun

For: 27342 Printed On: Nov-07-2012 (Wed.)



NARRATIVE TEXT HARDCOPY

GO# 2011-618292 ARREST-DETECTIVE

090A-1 MURDER 1ST DEGREE

MURDER 1ST DEGREE CASE SUMMARY

An unknown suspect took jewelry from then shot the victim with a handgun and fled the scene on foot.

The victim died as a result of these injuries. Next of kin was notified.

Author:RICE, NYLES
Related date:Nov-05-2011 (Sat.) 451

*** END OF HARDCOPY ***

For: 27342 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2012-92953 ARREST-DETECTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Feb-16-2012 (Thu.) 1400 Occurred on: Feb-16-2012 (Thu.) 1400

Approved on: Feb-16-2012 (Thu.) by: 36918 - WESTER, JAMES S

Report submitted by: 33139 - MONTAGUE, MARK I

Org unit: Squad 201

Accompanied by: 33138 - BARROW, JERRY O

Address: 1418 98TH AV E Municipality: TAMPA

District: 2 Beat: C4 Grid: 20

Felony/Misdemeanor: FELONY Bias: None (no bias)

Value loss: \$380.00 Value recovered: \$70.00

Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-1 BURGLARY STRUCTURE/DWELLING - COMPLETED

Location: Residence-Single

Offender suspected of using: Not Applicable

Offense: #2 230H-1 PT/GT ALL OTHER - COMPLETED

Location: Residence-Single

Offender suspected of using: Not Applicable

Criminal activity: Not Applicable

For: 36599 Printed On: Nov-06-2012 (Tue.)



GENERAL OFFENSE HARDCOPY

GO# 2012-92953 ARREST-DETECTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

Related Text Page(s)

Document: CASE SUMMARY
Author: 33139 - MONTAGUE, MARK I

Related date/time: Feb-16-2012 (Thu.) 1514

Subjects forcibly entered the victims residence that is boarded up. Subjects then stole the listed items then fled. Listed subjects were

detained then released.

For: 36599 Printed On: Nov-06-2012 (Tue.)

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TAMPA PD

GENERAL OFFENSE HARDCOPY

GO# 2011-514727 INACTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

General Offense Information

Operational status: INACTIVE Reported on: Sep-13-2011 (Tue.) 446

Occurred between: Sep-12-2011 (Mon.) 1645 and Sep-13-2011 (Tue.) 445 Approved on: Sep-14-2011 (Wed.) by: 43258 - PETERS, RANDY

Report submitted by: 49001 - CULBERTSON, RYAN

Org unit: Squad 212
Address: 6601 30TH ST N
Municipality: TAM

Municipality: TAMPA
District: 2 Beat: D6 Grid: 55

Felony/Misdemeanor: FELONY

Bias: None (no bias)
Value loss: \$1,200.00
Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-1 BURGLARY STRUCTURE/DWELLING - COMPLETED

Location: Residence-Single

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2011-514727 INACTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

Related Text Page(s)

Document: CASE SUMMARY Author: 49001 - CULBERTSON, RYAN Related date/time: Sep-13-2011 (Tue.) 550

Unknown suspect(s) entered the victim's residence through her bedroom window and stole several electronic items. The suspect(s) then removed all the property through her bedroom door and fled the area undetected in an unknown direction.

For: 36599 Printed On: Nov-07-2012 (Wed.)

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GENERAL OFFENSE HARDCOPY

GO# 2009-493545 ARREST-DETECTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Aug-21-2009 (Fri.) 2002

Occurred between: Aug-21-2009 (Fri.) 800 and Aug-21-2009 (Fri.) 2002 Approved on: Aug-22-2009 (Sat.) by: 32900 - MOORE, JULIE A

Report submitted by: 48810 - MCNIFF, KEVIN

Org unit: Squad 306

Address: 214 GIDDENS AV W
Municipality: TAMPA
District: 3 Beat: E2 Grid: 69

Felony/Misdemeanor: FELONY Bias: None (no bias)

Value loss: \$11,450.00 Value recovered: \$9,050.00

Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-1 BURGLARY STRUCTURE/DWELLING - COMPLETED

Location: Residence-Single

Offender suspected of using: Not Applicable

Offense: #2 230H-1 PT/GT ALL OTHER - COMPLETED

Location: Residence-Single

Offender suspected of using: Not Applicable

For: 40798 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2009-493545 ARREST-DETECTIVE

2200-1 BURGLARY STRUCTURE/DWELLING

Related Text Page(s)

Document: CASE SUMMARY Author: 48810 - MCNIFF, KEVIN Related date/time: Aug-21-2009 (Fri.) 2146

Unknown suspect(s) forced entry into the victims house and stolen several pieces of jewelry valued at approx \$6000 dollars. The suspect(s) fled the scene undetected.

For: 40798 Printed On: Nov-07-2012 (Wed.)

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GENERAL OFFENSE HARDCOPY

GO# 2011-668468 ARREST -PATROL

1200-7 ROBBERY / COMMERCIAL

General Offense Information

Operational status: ARREST -PATROL Reported on: Dec-02-2011 (Fri.) 2250 Occurred on: Dec-02-2011 (Fri.) 2245

Approved on: Dec-03-2011 (Sat.) by: 35777 - SCLAVAKIS, NICHOLAS S

Report submitted by: 50325 - BRADFORD, JARDA

Org unit: Squad 106

Address: 4820 ARMENIA AV N Municipality: TAMPA District: 1 Beat: A3 Grid: 66

Felony/Misdemeanor: FELONY

Bias: None (no bias) Value loss: \$3,920.00

Special study: Fingerprints Attached

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 1200-7 ROBBERY / COMMERCIAL - COMPLETED

Location: Restaurant

Offender suspected of using: Not Applicable

Weapon type: Firearm

For: 36599 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2011-668468 ARREST -PATROL

1200-7 ROBBERY / COMMERCIAL

Related Text Page(s)

Document: CASE SUMMARY Author: 50325 - BRADFORD, JARDA Related date/time: Dec-02-2011 (Fri.) 2350

Two Black male suspects kicked in the rear screen door of El Zarape Mexican Grill. The two suspects were armed with black hand guns and confronted the victims at gun point. During the confrontation, the suspect forced the victims to give them cash from the cash register and the business cash bag. The victims suffered no injuries.

The property taken was a black purse containing 2,00.00 and cash (bills only) 800.00 in cash from the register (together valued at \$ 2800.00). Crime Scene Tech J. Rohas responded and processed the scene for photos and latent prints. The suspects fled on foot undetected and a BOLO was placed with their descriptions.

For: 36599 Printed On: Nov-07-2012 (Wed.)

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TAMPA PD

GENERAL OFFENSE HARDCOPY

GO# 2008-347402 ARREST-DETECTIVE

1200-4 HOME INVASION ROBBERY

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Jun-12-2008 (Thu.) 1934

Occurred between: Jun-12-2008 (Thu.) 1900 and Jun-12-2008 (Thu.) 1920 Approved on: Jun-13-2008 (Fri.) by: 31877 - MILILLO, CARLO

Report submitted by: 44144 - TRLAK, BRIAN E

Org unit: Squad 243

Address: 16287 ENCLAVE VILLAGE DR

Municipality: TAMPA
District: 2 Beat: C2 Grid: 226
Felony/Misdemeanor: FELONY

Bias: None (no bias) Value loss: \$6,370.00 Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 1200-4 HOME INVASION ROBBERY - COMPLETED

Location: Apartment/Condo

Offender suspected of using: Not Applicable

Weapon type: Handgun

Offense: #2 230D-7 PT/GT FROM BUILDING - COMPLETED

Location: Apartment/Condo

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2008-347402 ARREST-DETECTIVE

1200-4 HOME INVASION ROBBERY

Related Text Page(s)

Document: CASE SUMMARY Author: 44144 - TRLAK,BRIAN E Related date/time: Jun-12-2008 (Thu.) 1934

Approximately two suspects forced their way into the listed apartment at gunpoint, ordering the victim into a closet. The suspects fled the scene with over \$6300.00 worth of items from within the apartment. The one suspect seen was dressed completely in black, along with a black bandana covering the face. This occurred within the Promenade Condominiums in New Tampa.

For: 36599 Printed On: Nov-07-2012 (Wed.)

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TAMPA PD

GENERAL OFFENSE HARDCOPY

GO# 2008-357777 ARREST-DETECTIVE

2200-2 ARMED BURGLARY DWELLING

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Jun-17-2008 (Tue.) 2052 Occurred on: Jun-17-2008 (Tue.) 2050

Approved on: Jul-24-2008 (Thu.) by: 26161 - CONTENTO, JAMES R

Report submitted by: 45799 - MCCASLAND, THOMAS

Org unit: SAC

Address: 4223 RIVER HILLS DR E
Municipality: TAMPA
District: 2 Beat: C5 Grid: 40
Felony/Misdemeanor: FELONY

Bias: None (no bias)

Value loss: \$3,790.00 Value recovered: \$3,790.00

Special study: Fingerprints Attached

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-2 ARMED BURGLARY DWELLING - COMPLETED

Location: Residence-Single

Offender suspected of using: Not Applicable

Offense: #2 230D-7 PT/GT FROM BUILDING - COMPLETED

Location: Residence-Single

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2008-357777 ARREST-DETECTIVE

2200-2 ARMED BURGLARY DWELLING

Related Text Page(s)

Document: CASE SUMMARY Author: 45799 - MCCASLAND, THOMAS Related date/time: Jun-18-2008 (Wed.) 4

The listed defendants forcefully entered the victim's residence through the front door, removed the listed items, and fled the area in the listed vehicle. The defendants were located shortly after still in possession of the stolen items and were arrested.

For: 36599 Printed On: Nov-07-2012 (Wed.)

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GENERAL OFFENSE HARDCOPY

GO# 2011-60120 ARREST -PATROL

2200-1 BURGLARY STRUCTURE/DWELLING

General Offense Information

Operational status: ARREST -PATROL Reported on: Jan-30-2011 (Sun.) 2001

Occurred between: Jan-30-2011 (Sun.) 1630 and Jan-30-2011 (Sun.) 1900 Approved on: Jan-31-2011 (Mon.) by: 43122 - BRIDGMON, BRIAN R

Report submitted by: 50169 - CAMPBELL, AARON

Org unit: Squad 304

Address: 4209 CURTIS ST E

Municipality: TAMPA
District: 3 Beat: E6 Grid: 87
Felony/Misdemeanor: FELONY

Bias: None (no bias)

Value loss: \$279.00 Value recovered: \$34.00

Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 2200-1 BURGLARY STRUCTURE/DWELLING - COMPLETED

Location: Residence-Single

Offender suspected of using: Not Applicable

Offense: #2 230H-1 PT/GT ALL OTHER - ATTEMPTED

Location: Residence-Single

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2011-60120 ARREST -PATROL

2200-1 BURGLARY STRUCTURE/DWELLING

Related Text Page(s)

Document: CASE SUMMARY Author: 50169 - CAMPBELL, AARON Related date/time: Jan-30-2011 (Sun.) 2141

On 01-30-2011 at approximately 1630 hours, two possible known suspects made unlwful entry into the victm's residence by opening a window along the southwest side of the residence. While inside the suspects ransacked the southwest master bedroom by opening draws. Crime Scene Technician McGuigan responded and processed the scene and documented two sets of footprints leading to the entry window. The rear door of the residence was found

For: 36599 Printed On: Nov-07-2012 (Wed.)

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GENERAL OFFENSE HARDCOPY

GO# 2011-381107 ARREST -PATROL

900Z-18 DWLS WITH KNOWLEDGE

General Offense Information

Operational status: ARREST -PATROL Reported on: Jul-07-2011 (Thu.) 248 Occurred on: Jul-07-2011 (Thu.) 248

Approved on: Jul-07-2011 (Thu.) by: 42505 - BAXTER, ROBERT M

Report submitted by: 45158 - CHARBONNEAU, PETER A

Org unit: Squad 243

Accompanied by: 49529 - WILLIAMS, CURTIS

Address: DONA MICHELLE DR / BRUCE B DOWNS BL

Municipality: TAMPA

District: 2 Beat: C2 Grid: 240 Felony/Misdemeanor: MISDEMEANOR

Bias: None (no bias)

Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 900Z-18 DWLS WITH KNOWLEDGE - COMPLETED

Location: Highway/Roadway

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-07-2012 (Wed.)

GENERAL OFFENSE HARDCOPY

GO# 2011-381107 ARREST -PATROL

900Z-18 DWLS WITH KNOWLEDGE

Related Text Page(s)

Document: CASE SUMMARY

Author: 45158 - CHARBONNEAU, PETER A

Subject: CASE SUMMARY

Related date/time: Jul-07-2011 (Thu.) 248

On the listed date and time Officer Curtis Williams and were on duty in a fully marked Tampa Police cruiser and in full uniform. At that time we conducted a traffic stop on the listed Kia Sephia sedan due to driver, later identified as Defendant Laroy D. Sims, not wearing a seatbelt and for failing to dim high-beams when facing oncoming traffic.

Upon making contact, Sims provided an Inmate Released identification card and stated that he did not have his license. When I inquired further, Sims related that although he paid his fines in court, he had not yet reinstated his license with the DMV. A subsequent computer query confirmed that Sims was in fact suspended.

Based on our investigation, Officer Williams and I issued Sims a criminal citation (5780-GTP) for D.W.L.S. With Knowledge and released him on personal recognizance.

20110707025300068FDQ FL02902M0 LAROY D

SIMS 19871205M

--DHSMV--

S-520-524-87-445-0

LAROY, DONTAE, SIMS

9701 N 46TH ST TEMPLE TERRACE FL 33617

9701 N 46TH ST TEMPLE TERRACE FL 33617

TYPE LIC: CLASS E OPERATOR DOB: 12/05/87 HT: 501 RACE: B SEX: M

CURRENT LICENSE ISSUED: 07/22/2010 EXPIRES: 12/05/2017

LICENSE NOT VALID - DO NOT ISSUE 30 DAY PERMIT SOC SEC:592609656

02/23/2011 SUSP-INDEF FAILED TO PAY TRAFFIC FINE(PENALTY) 3004GOV CO:03

02/23/2011 SUSP-INDEF FAILED TO PAY TRAFFIC FINE(PENALTY) 4478GPF CO:03

04/20/2011 SUSP-INDEF FAILED TO PAY TRAFFIC FINE(PENALTY) 3832GPM CO:03 CT:1

END OF DDL/DHSMV RESPONSE

For: 36599 Printed On: Nov-07-2012 (Wed.)

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GENERAL OFFENSE HARDCOPY

GO# 2010-532474 ARREST -PATROL

260C-16 IDENTITY THEFT

General Offense Information

Operational status: ARREST -PATROL Reported on: Sep-07-2010 (Tue.) 2120 Occurred on: Sep-07-2010 (Tue.) 2120

Approved on: Sep-10-2010 (Fri.) by: 36745 - PRUITT, GARY A

Report submitted by: 44930 - BARTON, DAVID S

Org unit: SAC - DAYS

Accompanied by: 20965 - RODRIGUEZ, DENNIS Downtime: 133

Address: 2520 50TH ST N Apartment: 251

Municipality: TAMPA

District: 3 Beat: F7 Grid: 131

Felony/Misdemeanor: FELONY

Bias: None (no bias)

Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 260C-16 IDENTITY THEFT - COMPLETED

Location: Hotel/Motel

Offender suspected of using: Not Applicable

Offense: #2 260E-5 COMPUTER CRIME TO OBTAIN PROPE - COMPLETED

Location: Hotel/Motel

Offender suspected of using: Not Applicable

Offense: #3 350A-7A MISDEMEANOR POSSESSION - COMPLETED

Location: Hotel/Motel

Offender suspected of using: Not Applicable Criminal activity: Possessing/Concealing

Offense: #4 900Z-95 RACKETEERING - COMPLETED

Location: Hotel/Motel

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2010-532474 ARREST -PATROL

260 C-16 IDENTITY THEFT

Related Text Page(s)

Document: CASE SUMMARY Author: 44930 - BARTON, DAVID S Related date/time: Sep-07-2010 (Tue.) 2120

The defendants conspired and acted in concert in utilizing lap top computers, a computer program (Turbo Tax), and unlawfully obtained personal information in order to obtain multiple fraudulent income tax returns from the Internal Revenue Service. The defendant were all in actual or constructive possession of a misdemeanor amount of marijuana. The defendants were charged with Criminal Use of Information, Criminal Use of Computers, R.I.C.O., and Misdemeanor Possession of Marijuana.

For: 36599 Printed On: Nov-07-2012 (Wed.)

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GENERAL OFFENSE HARDCOPY

GO# 2011-464806 ARREST-DETECTIVE

260C-16 IDENTITY THEFT

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Aug-18-2011 (Thu.) 1939 Occurred on: Aug-18-2011 (Thu.) 1939

Approved on: Aug-19-2011 (Fri.) by: 45166 - PECORA, FELICIA A

Report submitted by: 46373 - JONES, AMY

Org unit: SAC

Accompanied by: 50004 - CAMPAGNANO, BRIAN Downtime: 174

Address: 30TH ST N/BUSCH BL E
Municipality: TAMPA
District: 2 Beat: C7 Grid: 31
Felony/Misdemeanor: FELONY

Bias: None (no bias)

Special study: Not Applicable

Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 260C-16 IDENTITY THEFT - COMPLETED

Location: Motor Vehicle

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-07-2012 (Wed.)

GENERAL OFFENSE HARDCOPY

GO# 2011-464806 ARREST-DETECTIVE

260C-16 IDENTITY THEFT

Related Text Page(s)

Document: INITIAL REPORT Author: 46373 - JONES, AMY Related date/time: Aug-18-2011 (Thu.)

On 08/18/11, Ofc Campagnano and I were assigned to the District II ROC Squad. We were in my unmarked vehicle and were wearing our Police issued vest with our badges visible.

On this date, we observed a gold Nissan Maxima, FL tag 892WPH travelling westbound on Busch Blvd in the center lane. The driver (later identified as Cortez) was not wearing his seatbelt. Cortez was the only occupant of the vehicle. Due to the seatbelt violation, we conducted a traffic stop on Busch Blvd just east of 30th St. Upon making contact with Cortez and explaining the reason for the stop, he provided his license. Ofc Campagnano conducted a computer check with negative results.

While Ofc Campagnano was conducting this computer check, Cortez stated he just recently got a ticket and had to pay close to \$300. Cortez also stated he is the main person who drives the vehicle but does allow friends to borrow it at times. Cortez appeared to be nervous as we spoke. Once Ofc Campagnano came back with his identification, I provided Cortez his license back and explained I was giving him a warning for the seatbelt violation.

I asked Cortez if there was any narcotics or anything illegal in the vehicle. Cortez advised there was not anything illegal. I asked for consent to search the vehicle and his person and Cortez provided verbal consent.

As Cortez opened the driver side door, it appeared as though he was attempting to conceal something in his left shoe. This item fell to the ground at which time I retrieved it. The item was a silver Visa Turbo Tax card belonging to Katherine Dampson. As I started the search, Cortez was obviously shaky. As I searched his pockets, I located bundles of cash in his right pocket and right rear pocket. (Cortez stated he worked at Walmart and the money was from his check). Also located in his left pocket was another silver Visa Turbo Tax card belonging to Wayne Seebaran. The search of the vehicle revealed a gold MasterCard (Green Dot) card belonging to a Willie Martinez. This MasterCard along with other cards were located in the center console. All cards and cell phone were given to Det Canfield (See supplement for details).

Cortez was transported to District II for an interview with Det Canfield.(See supplement for details). After the interview, Cortez was released.

For: 36599 Printed On: Nov-07-2012 (Wed.)



GENERAL OFFENSE HARDCOPY

GO# 2011-900497 ARREST-DETECTIVE

260 C-16 IDENTITY THEFT

General Offense Information

Operational status: ARREST-DETECTIVE Reported on: Aug-04-2011 (Thu.) 915 Occurred on: Jun-07-2011 (Tue.) 1048

Report submitted by: 45704 - CANFIELD, SHARLA M

Org unit: DLIS Address: 30TH ST N / BUSCH BL E Municipality: TAMPA District: 2 Beat: C7 Grid: 31 Felony/Misdemeanor: FELONY

Bias: None (no bias) Family violence: NO

Offenses (Completed/Attempted)

Offense: #1 260C-16 IDENTITY THEFT - COMPLETED

Location: Highway/Roadway

Offender suspected of using: Not Applicable

For: 36599 Printed On: Nov-07-2012 (Wed.)

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LIST OF REFERENCES

- Addinall, Robert. "Information in Warfare from Sun Tzu to the War on Terror." Dissertation, Royal Military College of Canada, 2004. http://www.cda-cdai.ca/cdai/uploads/cdai/2009/04/addinall04.pdf. Accessed May 7, 2012.
- Alexander, Dean C. *Business Confronts Terrorism: Risks and Responses*. Madison, WI: University of Wisconsin Press, 2004.
- Alexander, Dean C. and Terry Mors. "Best Practices in Identifying Terrorists during Traffic Stops and on Calls for Service." *Crime & Justice International* 23, no. 99 (2007): 4–12.
- Armao, John. *UASI Data Table of 26 Agencies: Burglary*. Tampa, FL: Tampa Police Department, July 10, 2012.
- Bellinger, Gene, Durval Castro, Athony Mills. "Data, Information, Knowledge and Wisdom." *Systems Thinking*. 2004. http://www.systems-thinking.org/dikw/dikw.htm. Accessed August 10, 2012.
- Benedict XVI. "The Development of Peoples and Technology." In *Charity in Truth*. Boston, MA: Pauline Books and Media, 2009.
- Billante, Nicole. "The Beat Goes On: Policing for Crime Prevention." *Issue Analysis*, no. 38 (July 1, 2003).
- Brafman, Ori and Rod A. Beckstrom. *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations*. London: Penguin Group, 2006.
- Bratton, William. "Cutting Crime and Restoring Order: What America Can Learn from New York's Finest." Lecture, The Heritage Foundation, Washington, D.C., October 15, 1996.
- "City Crime Rankings 2009–2010." CQ Press. 2009.

 http://os.cqpress.com/citycrime/2009/CityCrimeRankings2009.htm. Accessed March 16, 2012.
- City of New York. "Crime Prevention, Crime Statistics." New York City Police Department. 2012.

 http://www.nyc.gov/html/nypd/html/crime_prevention/crime_statistics.shtml.

 Accessed March 9, 2012.

- Clark, Maggie. States Defend Counterterrorism "Fusion Centers" After Harsh Senate Report. Washington, D.C.: Pew Research Center, 2012. "Crime in the United States." Federal Bureau of Investigation. 2009. http://www2.fbi.gov/ucr/cius2009/offenses/property_crime/burglary.html. Accessed November 30, 2011.
- "Criminal Intelligence Sharing Systems 28 CFR part 23Guideline." Regional Information Sharing Systems. http://www.riss.net/Policy/CFRGuideline. Accessed November 7, 2012.
- de bono, Edward. *Lateral Thinking: the Power of Provocation Manual*. Lancaster, PA: de Bono Thinking Systems, 2006.
- Dervin, Brenda. "Sense-making Theory and Practice: An Overview of User Interests in Knowledge Seeking and Use." *Journal of Knowledge Management* 2, no. 2 (1998): 36–46.
- Eccles, David W. and Paul T Groth. "Problem Solving Systems Theory: Implications for the Design of Socio-technological Systems." *Cognition and Learning* 3, (2006): 323–343.
- Encyclopedia Britannica. s.v. "Wayne Gretzky." 2008.

 http://www.britannica.com/eb/article-9001584/Wayne-Gretzky. Accessed October 12, 2012.
- Federal Emergency Management Agency. *Homeland Security Grant Program*. Washington, D.C.: U.S. Department of Homeland Security, 2012.
- Florida Legislature. "The 2012 Florida Statutes." http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0800-0899/0810/Sections/0810.02.html. Accessed October 4, 2011.
- Gardner, Howard. Five Minds for the Future. Boston, MA: Harvard Business Press, 2008.
- Gigerenzer, Gerd and Daniel G. Goldstein. "The Recognition Heuristic: A Decade of Research." *Judgment and Decision Making* 6, no. 1 (2011): 100–121.
- Gimpel, Scott. "NFL Stats." NFLdata.com. 2007. https://nfldata.com/nfl-stats/team-stats.aspx?sn=4&c=0&dv=0&ta=1&tc=0&st=OpponentOffensiveYards&d=0&ls=OpponentOffensiveYards. Accessed August 8, 2012.

- Groeschel, Benedict. "The Mystery of God." *The Mystery of the Trinity*. Catholic Audio. April 11, 2004.

 http://catholicaudio.us/pub/audionet/EWTN_programs/Fr_Benedict_Groeschel/Mystery_of_the_Trinity/. Accessed November 10, 2011.
- Haidt, Jonathan. The Righteous Mind. Toronto, Canada: Pantheon Books, 2012.
- Johnston, Steven, Hugh Lewis, Elizabeth Hart, Adam White, and Simon Cox. "Applying Cloud Computing to Space Situational Awareness." Southampton, UK: University of Southampton, 2011.

 http://www.congrex.nl/11c01proceedings/Papers/2226375%20Johnston.pdf. Accessed November 24, 2011.
- McNeilly, Mark. "Six Strategic Principles for Managers." *The Sun Tzu Strategy Site*. March 30, 2006. http://www.suntzul.com/. Accessed May 12, 2012.
- Merriam Webster. s.v. "solution." http://www.merriam-webster.com/dictionary/solution. Accessed November 18, 2012.
- Mintzberg, Henry. "The Fall and Rise of Strategic Planning." *Harvard Business Review*. January–February 1994. http://staff.neu.edu.tr/~msagsan/files/fall-rise-of-strategic-planning_72538.pdf. Accessed May 12, 2012.
- Mintzberg, Henry, Bruce Ahlstrand, and Joseph Lampel. *Strategy Safari: A Guided Tour through the Wilds of Strategic Management*. New York: Free Press, 1998.
- O'Neil, Siobhan. *Terrorist Precursor Crimes: Issues and Options for Congress*. Washington, D.C., Congressional Research Service, 2007.
- Orr, Frank. "Gretzky, Only 16, Carries a 'Gold-Orr' Label." *The Sporting News*. January 19, 2008.
- Pfeifer, Joseph W. "Network Fusion: Information and Intelligence Sharing for a Networked World." *Homeland Security Affairs* 8, Article 17, October 2012.
- "Predictive Policing." National Institute of Justice. January 2012.

 http://www.nij.gov/topics/law-enforcement/strategies/predictive-policing/welcome.htm. Accessed March 14, 2012.
- "Police Leaders at PERF/BJA Meeting Discuss CompStat: Best Practices and Future Outlook." *Subject to* Debate 25, no. 2 (March/April 2011). Police Executive Research Forum. http://www.policeforum.org/library/subject-to-debate/2011/Debate_Mar-Apr2011_web.pdf. Accessed April 25, 2012.

- "Public Safety and Incident Management." NC4. http://www.nc4.us/ESPONDER.php. Accessed October 10, 2012.
- Reaves, Brian A. "Census of State and Local Law Enforcement Agencies, 2008" (NCJ 233982). Bureau of Justice Statistics.

 http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2216. (accessed September 20, 2012.
- Rosenberg, Matt. "Names of Generations." *Geography*. About.com Guide. http://geography.about.com/od/populationgeography/qt/generations.htm. Accessed October 10, 2012.
- "Safety Grants Directory." Mutualink, Inc. 2012.

 http://www.mutualink.net/DHS_2009_Urban_Area_Security_Initiative_List.asp.

 Accessed March 16, 2012
- "Site Profiler." *Digital Sandbox*. http://www.dsbox.com/SiteProfiler/. Accessed October 10, 2012.
- "Smart Policing Initiative." *BJA Fact Sheet*. Bureau of Justice Assistance. September 2009. http://www.smartpolicinginitiative.com/sites/default/files/BJA%20smart_policing_fact_sheet.pdf (accessed March 16, 2012.
- Smith, Brent L., Kelly R. Damphouse, and Paxton Roberts. *Pre-Incident Indicators of Terrorist Incidents: The Identification of Behavioral, Geographic, and Temporal Patterns of Preparatory Conduct.* Washington, D.C., U.S. Department of Justice, 2006.
- Stuntz, William. "Local Policing After the Terror." *The Yale Law Journal* 3 (April 2002): 2137.
- Sullivan, John P. and James J. Wirtz. "Global Metropolitan Policing: An Emerging Trend in Intelligence Sharing." *Homeland Security Affairs* 5, no. 2 (2009).
- Tampa Police Department. Annual Report. Tampa, FL: Tampa Police Department, 2011.
- Toner, Eric S. "Creating Situational Awareness: A Systems Approach. 2009. http://www.upmc-biosecurity.org/website/resources/publications/2009/2009-06-10-SituationalAwarenessSystemsApproach. Accessed May 21, 2012.
- "Uniform Crime Reports." Federal Bureau of Investigation. http://www.fbi.gov/about-us/cjis/ucr/ucr. Accessed March 16, 2012.

- "Urban Area Security Initiative Nonprofit Security Grant Program." Federal Emergency Management Agency. http://www.fema.gov/preparedness-non-disaster-grants/urban-areas-security-initiative-nonprofit-security-grant-program. Accessed March 16, 2012.ii
- Walker, Richard W. "How DHS got its COPS on the Same Beat." GCN. October 18, 2012. http://gcn.com/Articles/2012/10/22/GA-DHS-Common-Operating-Pictures.aspx?s=gcndaily_191012&Page=1. Accessed October 20, 2012.
- Weisburd, David, Stephen D. Mastrofski, Rosann Greenspan, and James J. Willis, "The Growth of CompStat in American Policing." *Police Foundation Reports*. April 2004.
- Wikipedia. s.v. "Methods of Thematic Mapping." http://en.wikipedia.org/wiki/Thematic_map. Accessed March 14, 2012.

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